



15 APR 1960 November, 1959/\$1

ARMED FORCES management

PUBLISHED FOR THE ARMY, NAVY, AIR FORCE, COAST GUARD AND MARINE CORPS



This is the Department of Defense

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Secretary of
Defense ... p. 23*



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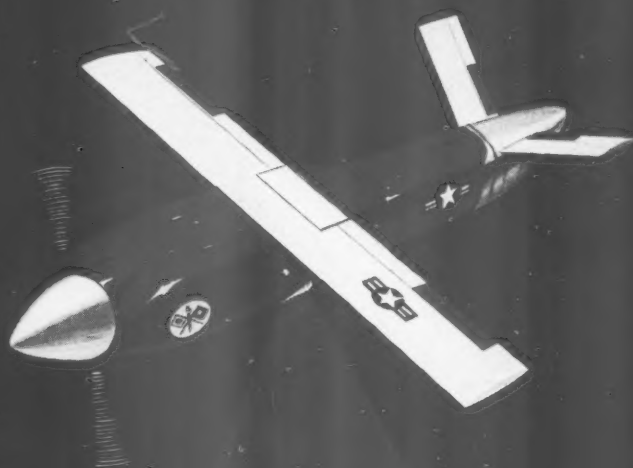
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CIRCULATION COPY 3

SURVEILLANCE DRONE SYSTEMS BY AEROJET

The Army's AN/USD-2 is today's most advanced drone system for gathering information on enemy battlefields. This high-priority Army program is a major part of Aerojet's acquisition of the Rheem Defense and Technical Products Division at Downey, California. Under the cognizance of Aerojet's Aeronautical Division, the SD-2 project is receiving increased emphasis during its advanced system development stages.

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'Jeep' XM443E1 showing versatility of its platform principle.

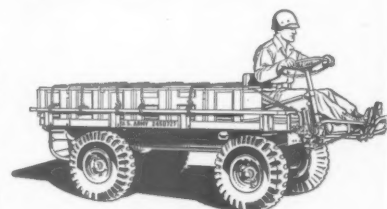
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ARMED FORCES MANAGEMENT

ARMED FORCES management

PUBLISHED FOR THE ARMY, NAVY, AIR FORCE, COAST GUARD AND MARINE CORPS

NOVEMBER, 1959

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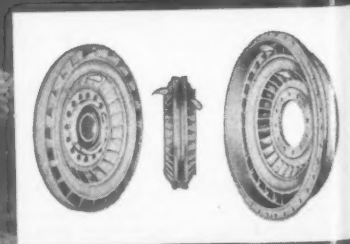
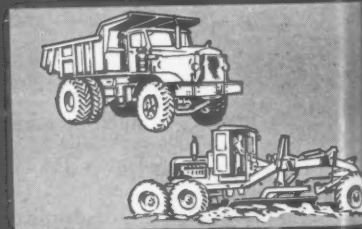
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FEATURED NEXT MONTH

Crystal Ball Gazing at the Puzzle Palace. . . . The 14 Erroneous Postulates. . . . Where ARDC's New Setup is Headed.

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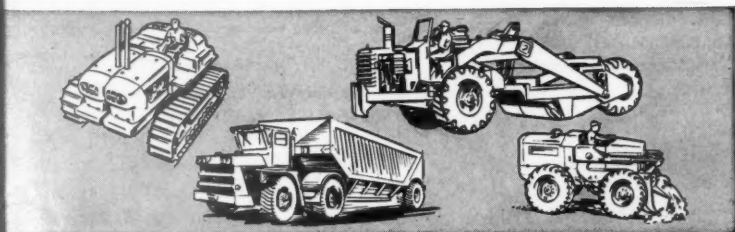
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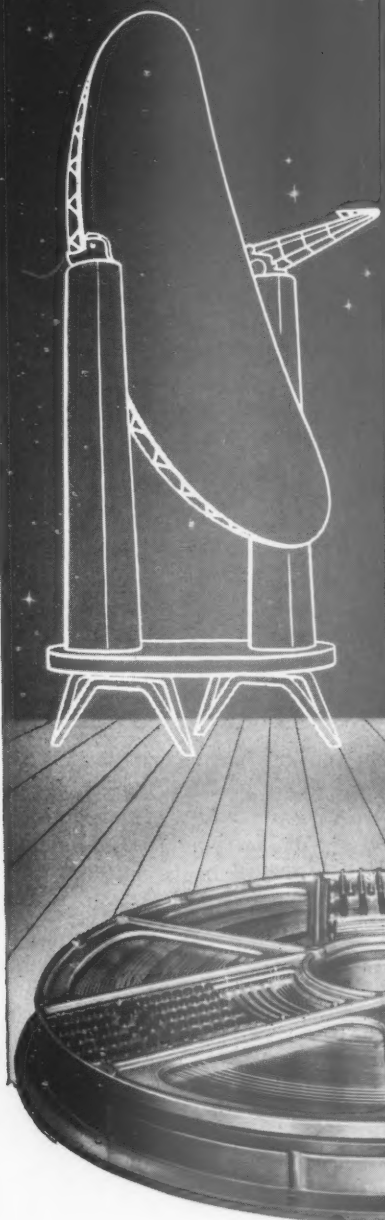
WHAT IT DOES: This unit is incorporated in the U.S. Air Force AN/FPS-26 Intercept Radar System, on which Avco-Crosley is the Prime Contractor to the Air Material Command's Rome Air Material Area — Griffiss Air Force Base, New York. The antenna and pedestal will stand three stories high and be housed in a radome about 50 feet in diameter.

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Problems Common to Us All

THIS month ARMED FORCES MANAGEMENT has tripled the size of the magazine to give you a special directory issue tag-lined "This is the Department of Defense."

Organizations are people first and foremost. An understanding of what's really happening in the Defense Department operation can come only from them. Unlike directories in the usual sense, this issue is an attempt to provide that understanding.

To find out, essentially, what the people think of the job, AFM's staff interviewed and/or queried hundreds of the Pentagon's top managers from the highest rung down to division and branch chief level. Scores of briefing documents were analyzed. (Many are reprinted here almost in entirety.) Countless attitudes and opinions were stacked one against the other.

Most of the editorial observations are, of course, our own but the facts to back them up, the observations from the men working in the Defense "front office," were checked and double checked for accuracy.

In the six months it took to plan, prepare, interview, write, verify, and produce this issue, AFM has acquired a new appreciation of two basic threads in the Defense fabric. Neither is a very startling discovery. But a recognition of both is necessary to understanding what the future of the military business operation is likely to be. One discovery concerns the people; the other, the problems.

It is hardly any secret that "a new type of business executive has come into being since World War II—the military man (usually with an eagle or some stars on his shoulders or a high civil service rating in his pocket) who is charged with helping to manage the largest business operation ever known to this country."

What is not understood nor appreciated by the American public generally is what sort of person this new military business executive is. The nature of the man is clear, however, to those who have been part of the ranks. Most recent endorsement came late last month from a man with more top-post seniority than any other individual in the Pentagon.

At a small, relaxed farewell-party-with-the-boys (among them: McElroy, Brucker, Decker, Burke, Twining, York, Snyder) now-retired Defense Comptroller Wilfred J. McNeil told AFM, "The wealth of individual talent running this (Defense Department) business is truly impressive and inspiring. Nowhere else in the country has so much ability been assembled in one place. That stimulating atmosphere is the one thing I most hate to leave."

Challenged by the Defense Department's growth in sheer size and complexity in recent years, the military-civilian officer-in-charge has responded, generally speaking, with a concerted effort to acquire the successful businessman's management skills. (One by-

product: most installation commanders no longer snort, as they once did when labelled a "manager.")

There is a Defense Department army of mushrooming proportions which need approach no industrialist in the country with apologetic hat in hand when it comes to management capability. Plenty of recent signs indicate that this launching into broader horizons is only beginning.

Item: Army's Technical Services have begun a little-recognized (but mightily impressive nonetheless) vendetta to abolish the phrase "Lead Time" as a significant factor in developing and supplying hardware.

Item: Navy is establishing pilot work study groups to advise commanders at sea (if they request it) on ways to better utilize their ship work force in non-fighting operations. An idea borrowed from the British Navy, the project got its initial push from no less than top Navy combat man Arleigh Burke.

Item: Air Force announced last month that it has more than 100 individuals assigned to special panels engaged in developing improved means of managing Air Force weapon systems during their life cycles. On the roster: Air Materiel Command's Anderson, ARDC's Schriever, and the Air Force Headquarters Comptroller, Inspector General, Deputy Chiefs of Staff for Operations, Development and Materiel.

The "problems" revelation? Writing in AFM last month Army Ordnance Brig. Gen. John Cave said, "Many of the problems we face individually are common to us all." Money, personnel retention, housing, utilization of facilities and resources, the burgeoning cost of weapons, these and many more are identical problems faced by all the Services. Broadening Army Secretary Brucker's appeal for "One Army" (a philosophical, not an organizational request) to all three Services would be a major step forward in efficient operations. There are ample examples that the work force in many cases would like to do just that.

Unfortunately, too little is being done to circulate this attitude among the men who wrestle with the snarls daily. Thus the fear lingers that some unidentified "boss of mine would probably cut my throat if I got too much help from them."

Progressive improvement of the organization is coming—far faster than most people realize. The pace would step up even more if there were more pooling of resources. Said one top Pentagon official:

"When the men running the show work in harness, in a joint effort, some of the things they accomplish are amazing. When they are at odds and inflexibly advocate a different school solution to a mutual problem, too often their efforts cancel each other out— and progress is nil."

Bill Borklund



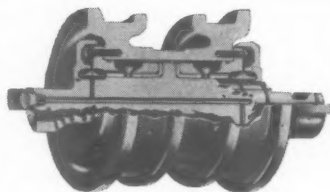
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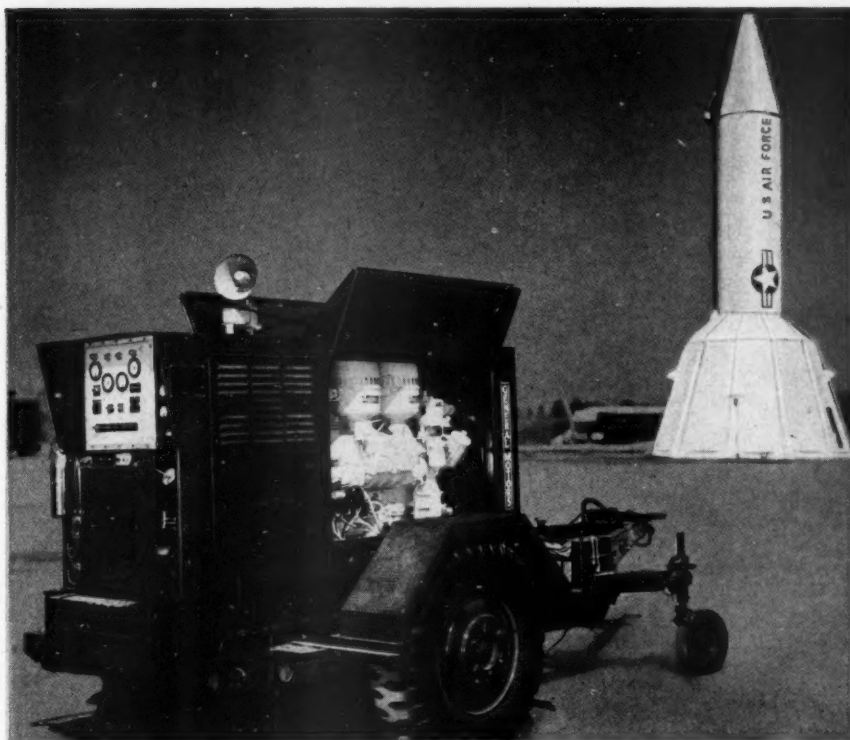
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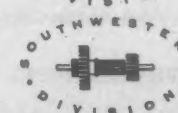


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NOVEMBER 1959

for flight control and air safety.

Continuous improvement in facilities. Through the years the Federal Aviation Agency has followed a continuing program of improving its facilities as the nation's air traffic grew. For example, both the aviation weather relay and the flight supervisory networks utilize built-in control features of the Model 28 "stunt box." Also, new Teletype tape punch and reader equipment, with a potential of 1,000 words per minute, will soon be installed to further increase the speed and flexibility of the automatic weather reporting system.

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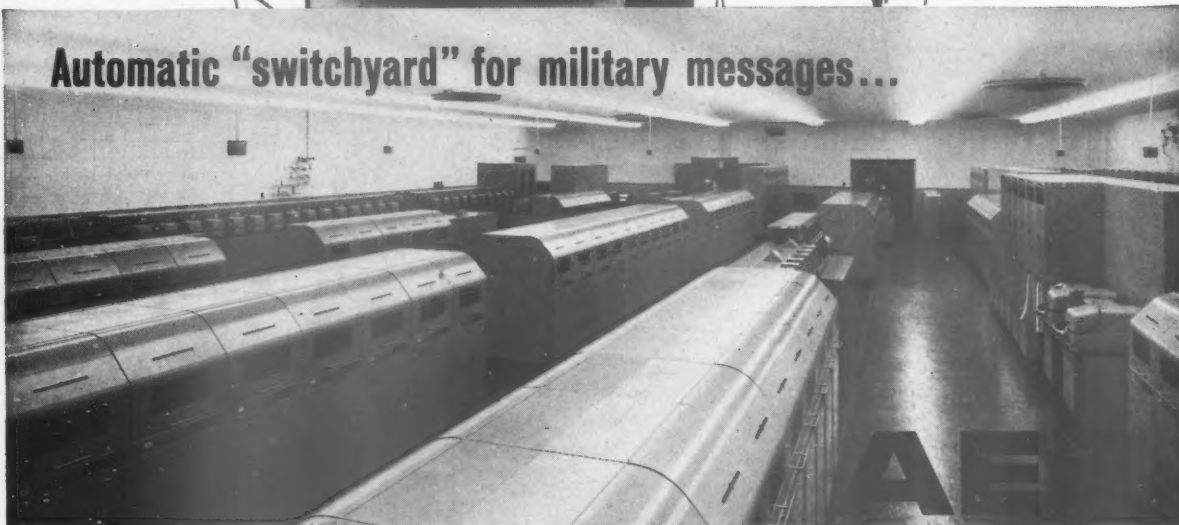
Translation

Kansas City: Special observation #4, 1500 feet scattered clouds, measured ceiling 2500 feet overcast, visibility 4 miles, light rain, smoke, sea level pressure 1013.2 millibars, temperature 58°, dew-point 56°, wind south 7 knots, altimeter setting 29.93 inches, pilot reports top of overcast 5500 MSL, rain began 5 minutes past the hour, overcast occasionally broken, runway 25 visual range 3200 feet.

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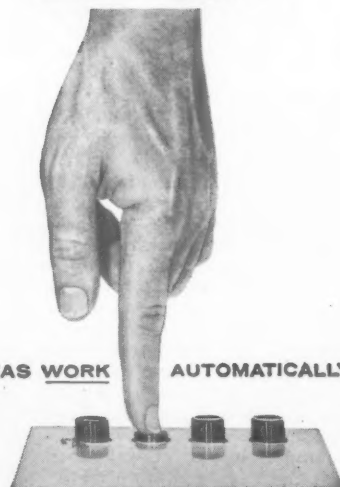
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In My Opinion

Brief Praise

"A Memo on Mismanagement," by Leland B. Kuhre, Director, Academy of Organizational Science, in the August 1959 issue. A brilliant and magnificent breakthrough in management concept.

W. Lamar Gammon

Management Planning and Review Div.
U.S. Navy Mine Defense Laboratory
Panama City, Fla.

"Low Bid" Article Praised

. . . I was pleased to see the way you handled the story on our supplier's evaluation index. I also found some of the other articles in this issue interesting (August AFM).

W. A. MacDonald

Chairman of the Board
Hazeltime Corporation

ASW Praise

. . . I am sure that the Navy as a whole is vitally interested in improving our ASW capability and just what form it will take as a matter of practical application is difficult to foresee at this time. The Navy's many responsibilities tax our limited budget to the extreme and I agree with you that the Navy has done a remarkable job within its limited funds.

You can be assured that I will always support in every way possible our ASW effort because I firmly believe it is one of our most important problems.

I would like to compliment ARMED FORCES MANAGEMENT Magazine for your constructive articles.

RAAdm. W. F. Raborn

Director,
Special Projects Office
U.S. Navy

Kind Words For Us Imps

As a new member this year of the Armed Forces Management Association, I wish to express my opinion that your July "Electronic Data Processing Issue" is well balanced and also well worth the year's membership fee.

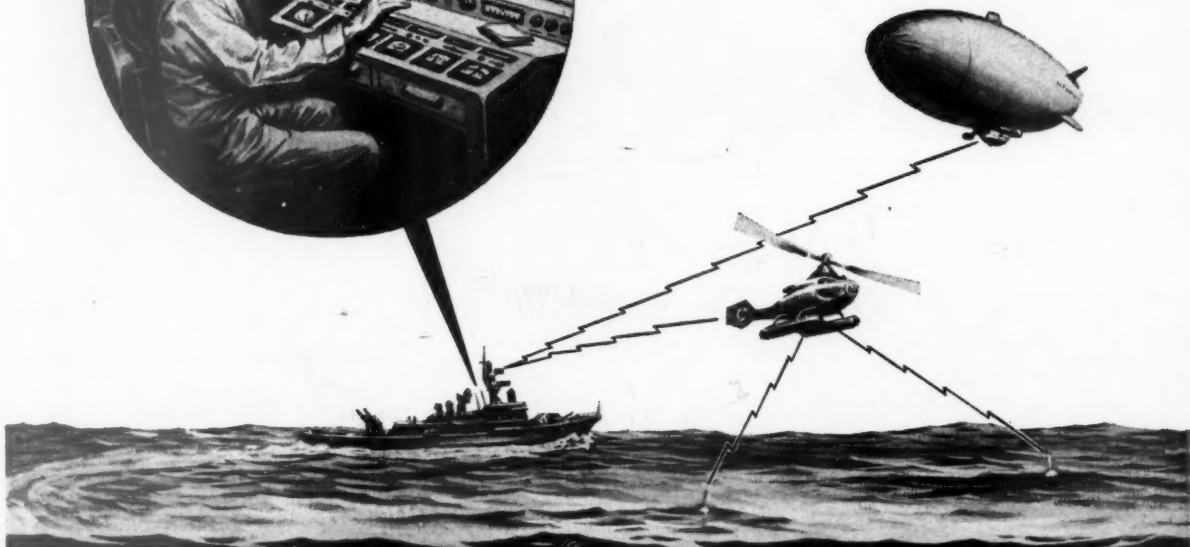
My congratulations to Mr. Palmer for his Gilbert and Sullivan takeoff on EDP with his article, "Creating Chaos with EDP" and equal credit to the editor who had the rather impish wisdom to select it for publication.

Lt. Col. Vernon L. Lewis

Chief,
Quartermaster Quality Control Agency
Columbus General Depot
U.S. Army

ARMED FORCES MANAGEMENT

Report from ARMA



Central Battle Director

One man, one machine can hold the key to identification and tracking of enemy submarines.

This Central Battle Director—a centralized electronic system assimilating data from all tracking agents—would make possible swifter, more efficient coordination of effort from the Hunter-Killer commander.

The Central Battle Director, once identification and tracking were complete, could transfer its data to other vehicles which would aid in directing the kill.

ARMA, which already has contributed stable elements, fire-control and gyroscopic devices to the Navy, is continuing to investigate and study new concepts that will aid in eliminating the submarine threat.

ARMA, Garden City, N. Y., a division of American Bosch Arma Corporation . . . the future is our business.

7261-A

Attention, Engineers: Write to E. C. Lester, Emp. Supv., about career openings in R & D programs.

AMERICAN BOSCH ARMA CORPORATION

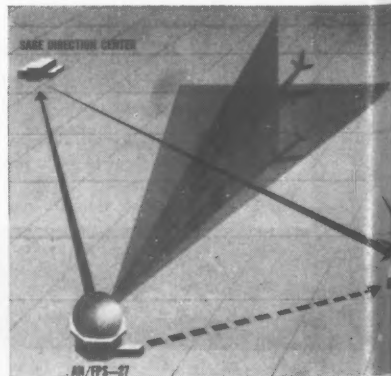
CAPABILITIES FOR DEFENSE



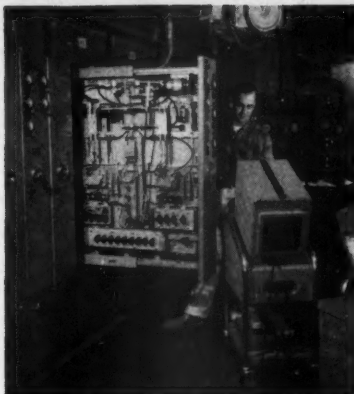
Westinghouse AN/FPS-27 Radar in operation at an Air Defense Command site

A single Westinghouse radar gets a 3-D fix on the enemy...dilutes his jamming ability

The AN/FPS-27, versatile 3-D radar designed by the Westinghouse Electronics Division for the Air Force's Rome Air Development Center, is achieving new standards of performance, reliability . . . and economy. Now under contract from the Rome Air Materiel Area, this high-power, stacked beam radar gathers range, azimuth and height data quickly and accurately while eliminating unwanted signals. These comprehensive functions in a single radar represent the application of the latest state of the art radar techniques to our nation's early warning defense.



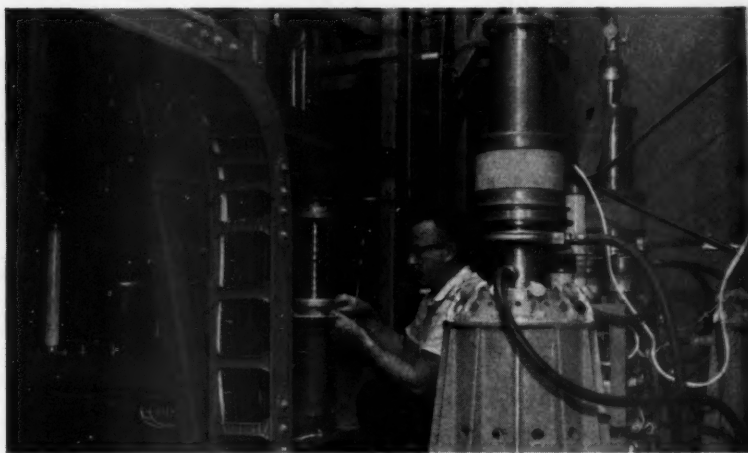
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MAINTENANCE EASE: AN/FPS-27 design stresses reliability and maintenance accessibility. A separate monitor console calibrates the receivers remotely. Equipment troubles are automatically indicated. Sub-assemblies can be replaced rapidly in case of circuit malfunction.

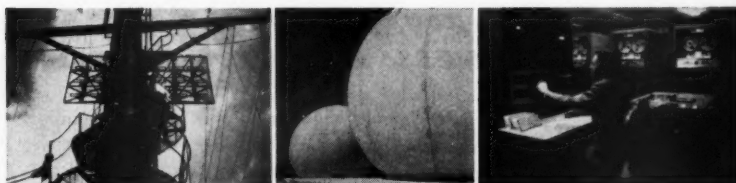


UNIQUE CONSTRUCTION DESIGN of the antenna system permits the inclusion of the latest 3-D height-finding techniques. Range, azimuth and height data can be automatically fed to a computer to form a composite picture of the air defense sector.



EASE OF OPERATION: One man operates the entire transmitter room. This is typical of the operational ease of the Westinghouse designed AN/FPS-27. A minimum team of six specially trained men can handle the operation and maintenance of the entire facility.

Here is the management team responsible for the development of the AN/FPS-27—within budget and on schedule. This team is typical of the Westinghouse practice of matching talent to the job.



The AN/FPS-27 is a part of a broad Westinghouse effort in shipboard, tactical and airborne radar. Current simulation studies at the Air Arm Division, utilizing the latest digital computer facilities (at right), hold promise for new approaches to the problem of long-range detection and tracking of aircraft and ICBM's.

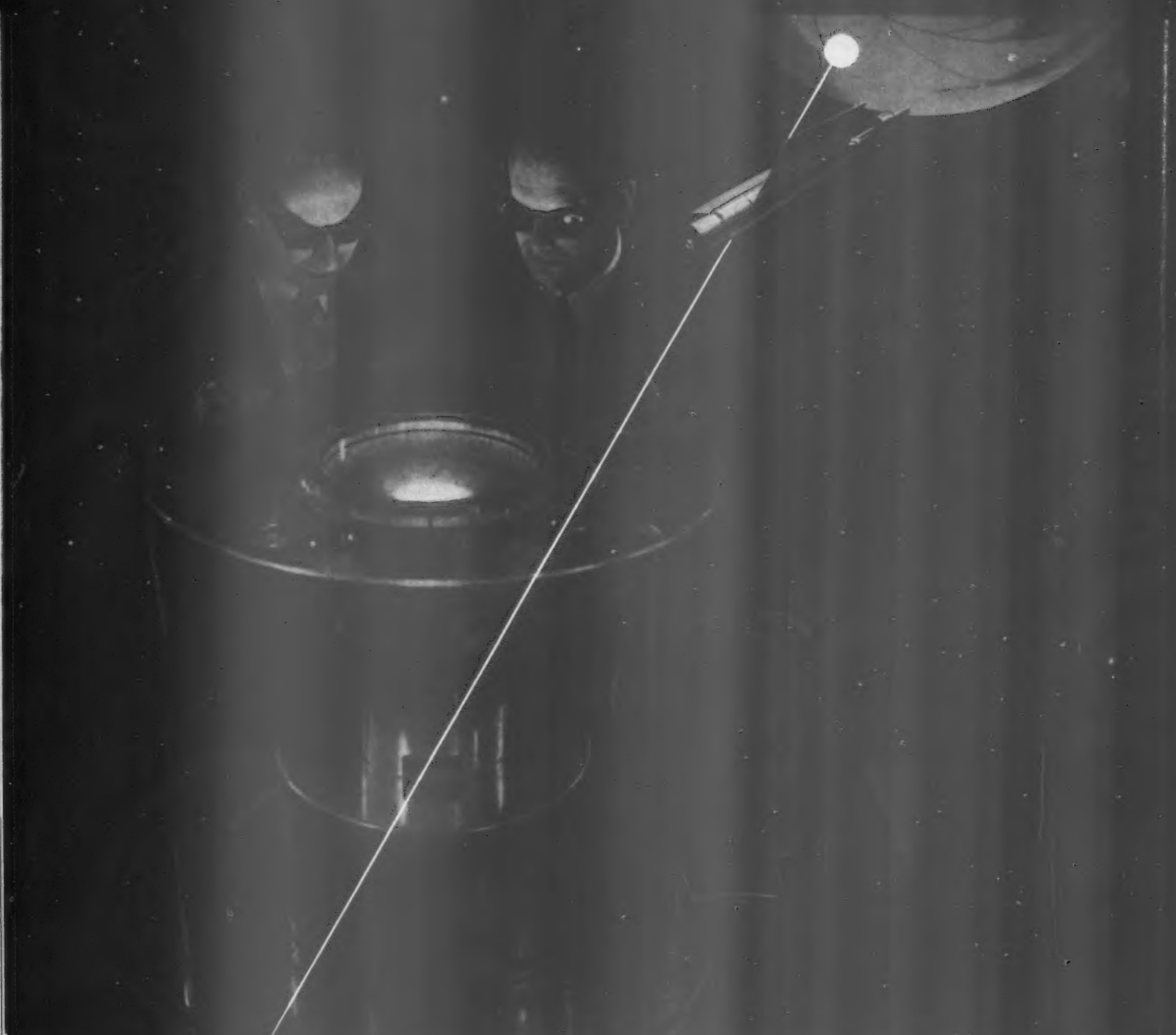
Westinghouse

DEFENSE PRODUCTS

1000 CONNECTICUT AVENUE, N.W., WASHINGTON 6, D.C.

AIR ARM DIVISION
AVIATION GAS TURBINE DIVISION
ELECTRONICS DIVISION
AIRCRAFT EQUIPMENT DEPARTMENT
ORDNANCE DEPARTMENT
WASP

YOU CAN BE SURE... IF IT'S Westinghouse



PINCH PLASMA ENGINE NEW POWER FOR SPACE VEHICLES

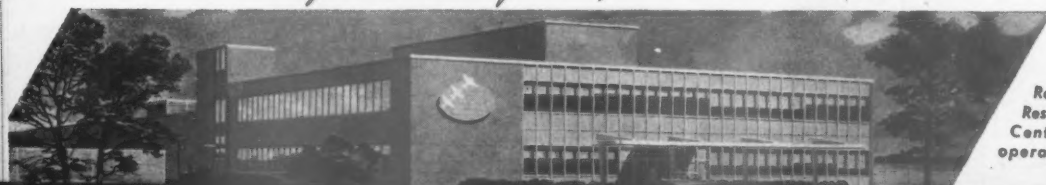
"The experimental model of a new concept . . . a magnetic pinch plasma engine for interplanetary space travel is in operation at our laboratories," says Alfred Kunen (R) Project Engineer, Plasma Propulsion Project, shown, with Milton Minneman of Republic's Scientific Research Staff, during actual operation of the engine. >>> Republic's plasma engine unique in that it utilizes intermingled positively and negatively charged particles in a single jet thrust, can operate on fuels more readily available than required for an ion engine, and attains greater thrust. By compressing these particles in an invisible cylindrical magnetic girdle and shooting plasma out the rear at tremendous velocities, sufficient thrust is generated to push a vehicle through the near-vacuum of outer space. >>> Republic is working on advanced plasma engine studies for the U. S. Navy Office of Naval Research and the U. S. Air Force Office of Scientific Research. >>> Today's pinch plasma engine is but one of many bold concepts under development at Republic to create for the space world of tomorrow. It is part of Republic's multi-million dollar exploration into the realm of advanced aircraft, missiles and space travel.

REPUBLIC AVIATION

FARMINGDALE, LONG ISLAND, N. Y.



Designers and Builders of the Incomparable **THUNDER-CRAFT**



Republic's new \$14,000,000, Research and Development Center, is scheduled for operation early in 1960.

O

NOVEN



DEFENSE ORGANIZATION

*The trend to
unification . . .*



THE unparalleled dispersal, size and diversity of military operations accounts to a large extent for the unique administrative problem presented by the Department of Defense.

Department of Defense activities circle the globe. Substantial forces are assigned to Europe and the Far East. Mutual Defense Assistance Programs touch most of the countries of the free world. Close military relations have been established with our NATO allies, with our friends in the Middle East, Africa and Asia, with Australia and New Zealand, and with our Canadian and South American neighbors.

Measured in terms of dollars, the Department's annual expenditures, with Military Assistance spending included, are nearly 43 billion dollars—about 55 percent of all Federal expenditures. By way of comparison, \$43 billion is 30 stacks of \$1,000 bills—each higher than the Washington Monument.

Measured in terms of personnel, more than 8,500,000 people and their families are directly affected by the Department of Defense policies. This includes about 2,500,000 men and women in the armed forces, nearly 1,100,000 civilian employees and 200,000 foreign nationals, 4,500,000 reservists, and about 250,000 military personnel on retired pay.

Measured in terms of property, the Department has assets estimated to have cost the government about 150 billion dollars—or more than twice the assets of the 100 largest manufacturing corporations in the United States.

In addition to the size of the operation, the diversity of activities creates serious management problems. The military departments perform every conceivable function. Besides recruiting, training, equipping and transporting military personnel, we must feed, clothe, house, pay, hospitalize, insure and bury them. The Department of Defense is the biggest purchaser in the United States and, next to the Department of the Interior, the largest real estate operator. There is hardly a single occupational activity that is not represented in the armed forces.

Added to these complexities is the \$8 billion headache created each year by the rapid obsolescence of equipment due primarily to the constant advances in military science. As new weapons enter our arsenal, not only are the old ones gradually discarded, but thousands of specialized items must be eliminated from our inventory.

For example, not very long ago the B-36 was hailed as the world's finest bomber. Our B-36 fleet cost more than \$1 billion. Recently the last B-36 went out of inventory. Motors and electronics were salvaged; the rest of the planes have been melted down into aluminum ingots. Waste? No! Although no B-36 ever dropped a bomb in anger, the mere existence of this powerful aircraft has been one of the big deterrents to a major war—this has been worth many times more than the price we paid for preparedness.

All surplus items are constantly under review. Some

From the top, unified control . . .



**Before Congress and the entire nation
Defense Secretary McElroy
is the top DOD figure.**

go to other military services and government agencies—some to our allies—some to our classrooms—and finally, there is no alternative except “junk”—which, incidentally, returns 300 million dollars each year to the United States Government.

With headaches like these, is it any wonder that the military services each year procure \$120,000 worth of aspirin and \$1 million worth of tranquilizers?

It is against this backdrop of management problems, then, that the Department of Defense organization has been designed.

Statutory Precepts

The guidelines for the management of the Department of Defense were established by the National Security Act of 1947, to which major amendments were added in 1949, 1953 and 1958.

The general trend of these statutory changes has been to clarify as much as possible the powers of the Secretary of Defense over the entire defense establishment and to give the Secretary greater flexibility in his management of the Department. The objective of these changes has been to provide increasingly closer integration of the military services, considered essential, by the Congress and the Administration, for the effective and efficient management of the armed forces.

The 1947 National Security Act established a Secretary of Defense who was essentially a coordinator—developing only general policies, primarily by persuasion, for three Executive Departments—the Army, Navy and Air Force. Under the 1947 Act, the Secretaries of the military departments retained all their powers and duties as heads of independent executive departments, except those specifically conferred on the Secretary of Defense. The Secretary of Defense was granted authority over budgets and expenditures, and was made responsible for the elimination of unnecessary duplication in the fields of procurement, supply, transportation, storage, health and research.

The original Act authorized only three Special Assistants to the Secretary of Defense and provided for continuing three well established agencies—the Research and Development Board, the Munitions Board and the Joint Chiefs of Staff.

The 1949 Amendments stressed that the Secretary of

Defense was to be the principal assistant to the President in all matters relating to the Department of Defense. The Army, Navy and Air Force lost their status as Executive Departments and became military departments—a unique organizational concept. As such, they are something less than Executive Departments, but more than Bureaus or Services within an independent Executive Department. The Secretaries of the military departments still retained their former powers and duties but these were to be exercised subject to the direction, authority and control of the Secretary of Defense.

The 1949 Amendments also authorized additional staff assistance for the Secretary of Defense—a Deputy Secretary, three Assistant Secretaries in lieu of the three Special Assistants, and a Chairman of the Joint Chiefs of Staff. The size of the Joint Staff was increased from 100 to 210 officers. A new Title IV was added to the Act at that time, providing uniform budgetary and fiscal procedures throughout the Defense establishment.

By 1953, the need for another review of the Defense organization had become evident. During the Korean conflict, the statutory board structure had shown itself to be inefficient and the Secretary's staff lacked the flexibility to adjust readily with changing requirements. Thus, another careful review was initiated in the spring of 1953 by Secretary Wilson and the Rockefeller Committee.

Reorganization Plan No. 6 of 1953, which became effective on June 30, 1953, gave greater management flexibility to the Secretary of Defense. The President's message transmitting the Plan to the Congress made it clear that no function in the Department was to be carried out independent of the authority of the Secretary of Defense and that the Secretary of the military departments were to be—in addition to being the heads of their departments—the “operating managers” for the Secretary of Defense. Statutory boards and positions in the Office of the Secretary of Defense were abolished, and their functions transferred to the Secretary of Defense. Six additional Assistant Secretaries, or a total of nine such positions, and a General Counsel were authorized, and the Chairman of the Joint Chiefs of Staff was given greater authority in managing the Joint Staff.

The Defense Reorganization Act of 1958 increased still further the responsibilities of the Secretary of Defense, particularly in the operational direction of the armed

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forces and in the research and development field. The intent of the Congress in enacting the new law is probably best illustrated by the changes made in the Preamble to the National Security Act. The wording "to provide three military departments separately administered" was changed to read "to provide a *Department of Defense, including three military departments*," and further provided that these were to be "separately organized" rather than "separately administered."

The number of Assistant Secretaries was reduced from nine to seven, but a new position of Director of Defense Research and Engineering was established to supervise all activities in that area.

It appears that with the 1958 changes we have gone as far as we can in establishing a centralized authority within the basic 1947 concept of three separate military departments. The only current statutory limitations on the powers of the Secretary of Defense are:

First . . . he shall not merge the military departments.

Second . . . statutory functions shall not be changed without careful Congressional review—excepting, however, from this prior review "the development and operational use of new weapons or weapons systems" and common supply or service activities.

Third . . . he shall not have a single Chief of Staff, an overall armed forces general staff, or any military staff other than the Joint Chiefs of Staff.

And finally (if it is a limitation), the Secretaries of the military departments and the members of the Joint Chiefs of Staff may present to the Congress any recommendation they deem proper. This provision, not used since it was established in 1949, was retained by the Congress in 1958, although the President described it as "legalized insubordination."

Organizational Concepts

Under the provisions of the 1958 Act, the basic organizational components of the Department of Defense are currently the following:

The Office of the Secretary of Defense, including the civilian advisors to the Secretary in specialized fields;

The Joint Chiefs of Staff, his military staff advisors;

The military departments of the Army, Navy and Air Force, each with their civilian and military staffs responsible for providing, training, and equipping effective and efficient armed forces;

The unified and specified commands, in charge of the operational forces assigned to a single command for the conduct of a Defense-wide military mission; and finally

Such other agencies as the Secretary of Defense establishes from time to time. Three such agencies have been established for the administration and operation of technical programs requiring specialized handling:

(1) The National Security Agency for special intelligence services;

(2) The Advanced Research Projects Agency for military applications of space technology; and

(3) The Defense Atomic Support Agency for military applications of atomic energy.

An operation as vast as the Department of Defense can be effectively managed only by centralization of policy formulation and decentralization of operations.

In accordance with this principle, two command lines have been established: one for the operational direction of the armed forces running through the Joint Chiefs of Staff to the unified and specified commands—and the



McElroy's missiles:

Although the picture is new, most of them are already obsolescent.

Functions of OSD . . .



other for the direction of support activities running to the military departments.

Administrative Authority

A proper understanding of staff relationships in the Department of Defense involves knowledge not only of the organizational structure but also of the derivation of administrative authority in the Department.

Administrative authority—that is, the authority vested by law in the head of an executive agency to run his department—is vested independently in the four top civilian officials of the Department of Defense. The Secretary of Defense has this authority for all activities in the Department other than the military departments, and the Secretaries of Army, Navy and Air Force have it for their respective departments. In other words, the Secretaries of the military departments derive their administrative authority independent of the Secretary of Defense—not by delegation from him. The exercise of these authorities, however, is subject to the direction, authority and control of the Secretary of Defense.

In recognition of this derivation of administrative authority, all management and administrative procedures have been designed to function within this quadri-partite structure, which until 1958 was identical with the organizational structure—with all functions organized under either Army, Navy, Air Force or the Office of the Secretary of Defense.

Newly established joint agencies or activities have been assigned whenever possible to one of the military departments for administrative support since the early days of the Unification Act. The National War College, the Industrial College, the Armed Forces Supply Support Center and the various Single Manager Agencies illustrate the extent to which the administrative authorities of the military departments have been utilized in the administration of activities performing Defense-wide missions.

A first step toward breaking the hold that this psychological administrative barrier had on the organization of the Department was taken in early 1958 with the establishment of the Advanced Research Projects Agency as a separately organized, operating research agency in the Department of Defense.

Further steps in this direction were taken as a result of

the 1958 Reorganization Act. The Secretary determined that the organization of the Joint Chiefs of Staff should not be considered a component of the Office of the Secretary of Defense, and gave this organization status and identity as a separate major component of the Department of Defense. Similar status was assigned to the unified or specified combatant commands, which were made by the law directly responsible to the President and the Secretary of Defense rather than through the Secretaries of the military departments acting as "Executive Agents of the Secretary of Defense."

Despite these organizational developments, all activities must still be fitted into the statutory quadri-partite administrative structure. Accordingly, the Joint Chiefs of Staff and the Advanced Research Projects Agency derive their administrative authority from the Secretary of Defense. Similarly, each of the unified and specified commanders and the agencies assigned to the military departments for support derive their administrative authority from the Secretary of the military department that has been assigned support responsibility by the Secretary of Defense. Thus, the military departments remain the administrative focus for many Defense-wide activities.

Having taken the organizational step, however, it should be possible in the future to adjust the administrative and management procedures in a manner to support the new organizational concept.

DOD and Federal Government

The most important fact, and the one most often forgotten, is that the Department of Defense does not exist by itself, but is only a part of the Executive Branch which itself is in a government of checks and balances—responsible to the people and existing in a constantly changing world. Thus it is inevitable that final military plans and programs cannot be arrived at just within the Pentagon, but that these plans and programs are affected by the stresses and strains existing in the larger framework.

This fact is illustrated by the many duties assigned to the Secretary of Defense. In addition to his primary duty of being the administrator of the Department of Defense:

- He is the principal assistant to the President in all Defense matters, meeting frequently with him to discuss special actions to be taken within the Department.
- He represents the Department at the weekly Cabinet meetings and is a member of various Cabinet committees.
- He is a member of the National Security Council together with the President, the Vice President, the Secretary of State, and the Director of the Office of Civilian and Defense Mobilization. At the weekly meetings of the Council, attended by the Chairman of the Joint Chiefs of Staff as military advisor and by other key officials as appropriate, our military policies are integrated with domestic and foreign policies, and the recommendations of the Council, when approved by the President, become the official guidelines for our military plans.
- As a member of the President's Space Council, he assists in the development of basic policies guiding the Nation's research efforts for the conquest of outer space.

The Secretary is also the major representative of the Department of Defense in its relations with other Executive agencies, discussing directly with the heads of these agencies problems of major importance.

- He works closely with the Secretary of State to insure that our military policies support our foreign policy objectives.

- b. He discusses intelligence problems with the Director of the Central Intelligence Agency who heads the central organization in the governmental "intelligence community." This includes the intelligence organizations of the three military departments, the Joint Chiefs of Staff, the National Security Agency, the Department of State, the Atomic Energy Commission, and the Federal Bureau of Investigation.
- c. He consults with the Chairman of the Atomic Energy Commission on matters which relate to the military application of atomic weapons or atomic energy.
- d. He works with the Director of the Budget in tailoring the Defense budget and legislative programs to Administration policies.
- e. He consults with the Secretary of the Treasury with respect to the impact of Defense spending on the national economy.
- f. He coordinates with the Administrator of the International Cooperation Administration on matters pertaining to military assistance and their relationship to the economic assistance provided friendly countries throughout the free world.
- g. He considers the Department of Defense implications of the defense mobilization program in close cooperation with the Director of the Office of Civilian and Defense Mobilization.
- h. He works with the Administrator of the National Aeronautics and Space Administration on the military aspects of aeronautical and space activities.

These are only a few examples of the agencies in the Executive Branch with which the Secretary must deal. In one degree or another, Defense programs involve activities of almost every one of the more than sixty executive de-

partments and independent agencies of the government.

Outside the Executive Branch, the Secretary represents the Department before Committees of the Senate and House during the consideration of major military bills or problems.

He is also the official Departmental spokesman to the American people on the activities of the armed forces—holding, when possible, bi-weekly press conferences, giving speeches, and issuing numerous statements on military matters.

Finally, he represents the Department at periodic meetings of the NATO Defense Ministers and at other international meetings.

In view of these many and varied responsibilities, the position of Deputy Secretary was created in 1949 to provide the Secretary with an alternate who can act for him on all matters within and outside the Department of Defense.

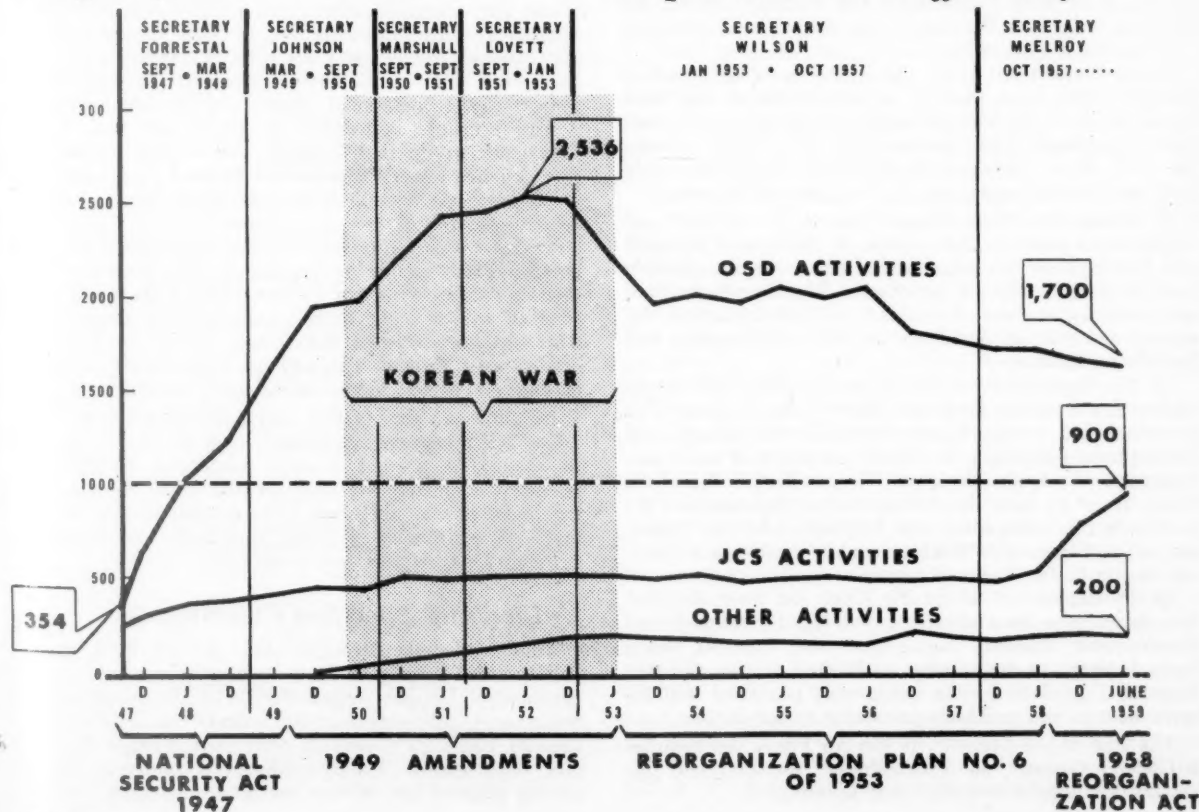
In carrying out their functions, the Secretary and his Deputy are using for final review of major Defense policies the two top advisory groups of the Department of Defense:

The Armed Forces Policy Council, where broad policies relating to the armed forces are considered at regular weekly meetings by the Secretary, his Deputy, the three Service Secretaries, the Director of Defense Research and Engineering, the Chairman of the Joint Chiefs of Staff, and the military chiefs of the Services; and

The Joint Secretaries, where matters concerning the general management of the Department are considered by the Secretary of Defense, his Deputy, and the Secretaries of the military departments.

By procedures such as these the advice of the operating managers of the Department of Defense—the Secretaries of the military departments—and of the chief mili-

Employment Trends . . . compactness and efficiency



The many components that make up the whole...

tary officers is brought to bear directly on the formulation of Defense plans, policies and programs.

The Military Departments

As for the military departments, the 1958 Reorganization re-emphasized their primary responsibility for the effective management of the vast administrative, training, and logistics functions of the armed forces, while relieving them from direct responsibility for military operations to be conducted through unified and specified commands. It is their job to provide, administer and support the operational forces required for our national security and to perform these tasks with economy and efficiency.

The Secretaries of the military departments—each heading a department much larger than any executive department except the Department of Defense itself—are each authorized an Under Secretary and three Assistant Secretaries as their principal civilian assistants.

The relationship of the Secretaries and their chief assistants to their military staffs has not been made uniform. Each Secretary has developed the type of relationship most suitable to his department.

To prevent possible conflict with the new chain of command for the operational direction of the forces assigned to unified and specified commands, each of the Service Chiefs—the Army and Air Force Chiefs of Staffs, the Chief of Naval Operations, and the Commandant of the Marine Corps—exercises supervision, rather than command, over his military Service. Additionally, the Service Chiefs have delegated to their Vice Chiefs full authority to act for them, in order that the Chiefs may devote more attention to their duties as members of the Joint Chiefs of Staff.

In the Department of the Army, the Assistant Secretary positions have been assigned responsibilities in the functional fields of financial management, logistics, and manpower, personnel and reserve forces. The latter includes the civil affairs functions of the Army, which previously had been handled separately by an Assistant Secretary.

In recognition of the importance of the research and development function, the position of Director of Research and Development has been established at a level equivalent to that of the Assistant Secretaries. The Secretariat Staff also includes a General Counsel, an Administrative Assistant, and military Assistants for Public Information and Legislative Liaison.

In the Department of the Navy, the fields of responsibility for Assistant Secretaries have been designated as personnel and reserve forces, material, and research and development—all under the direct supervision of the Under Secretary, who is also designated as the Comptroller of the Navy. Here we have the Administrative Assistant and the Assistants for Information and Legislative Liaison reporting to the Secretary of the Navy, while the General Counsel reports to the Under Secretary.

In the Department of the Air Force, the three Assistant Secretaries have been given responsibility for research and development, financial management and materiel, while Special Assistants have been established at the Assistant Secretarial level to handle manpower, personnel and reserve matters and problems pertaining to installations.

The staff of the Secretary of the Air Force also includes a General Counsel, an Administrative Assistant and Assistants for legislative liaison and information.

In the overall management of the Department of Defense, the Secretaries of the military departments occupy the key places. They are responsible for the effective management of vast organizations and act, at the same time, as the principal advisers of the Secretary of Defense in the formulation of Defense policies and programs.

They have a most difficult assignment. They are looked upon by their subordinates as the major defenders of the interest of the military Services and by the Secretary of Defense as his "operating managers." They—like their chief military officers in their capacity as members of the Joint Chiefs of Staff—represent the bridge between overall Defense requirements, determined within the framework of national policies, and Service interests. This assignment has never been an easy task.

The Joint Chiefs of Staff

The Joint Chiefs of Staff hold a special position in the Department of Defense organization. They are the military advisors—not only to the Secretary—but also to the President and the National Security Council. Their duties are defined by law. Their members, except for the Chairman, are also the chief military officers in their respective departments.

As noted before, every reorganization effort since 1947 included provisions to strengthen the Joint Chiefs of Staff organization in order to assure the best possible strategic planning and operational direction of our armed forces.

The current organization of the Joint Staff aligns it more closely than before to that of the staffs of the unified commands and the military departments. The 1958 Reorganization, in addition to expanding the Joint Staff from 210 to 400 officers, abolished the committee system, and replaced it with a true staff system organized around seven Directorates. The seven new Directorates are J-1, or personnel; J-2—intelligence; J-3—operations; J-4—logistics; J-5—plans; J-6—communications; and a directorate for military assistance. This reorganization, as well as the enlarged staff, should greatly assist the Joint Chiefs in carrying out their vital roles as military advisors and as principal assistants in the operational direction of the armed forces.

The principle underlying these changes was, in the President's words, that "separate ground, sea and air warfare is gone forever." This means that our ground, sea, and air forces must operate as a team under single command—not separately.

To meet this requirement a new streamlined chain of command was established running directly from the President and the Secretary of Defense through the Joint Chiefs of Staff to the eight unified and specified commanders. This change abolished the former system under which orders went through the military departments, acting as executive agencies, before reaching the unified commands.

In addition, the unified commanders were given in 1958 "full operational command" over the forces assigned to them. To prevent possible command conflicts, the statutory command authority of the chiefs of the military Services was abolished (where appropriate), and the unilateral withdrawal of forces from unified commands by a military department was prohibited.

Unified and Specified Commands

Thus, under the Reorganization Act of 1958, unified and specified commands have been established in the Department of Defense, responsible to the President and the Secretary of Defense for the military missions assigned through the Joint Chiefs of Staff—not through the military departments. These combatant commands are the cutting edge of our military machine—including the units

which will do the actual fighting. The entire Defense organization exists for the purpose of making them effective.

A unified command consists of the unified commander's headquarters staff and component commands for each of the military Services providing forces to the unified command. The unified Commander is an officer of General or Flag rank, selected by the Secretary of Defense from one of the Services with the advice of the Joint Chiefs of Staff. The Headquarter's staff includes officers from each of the military services having forces assigned.

Responsibility for the support of a unified command headquarters is assigned to one military department—normally the one which furnishes the commander. Thus the Army provides headquarters support as well as direct support for Army units for the European and Caribbean Commands. The Navy performs similar functions for the Pacific and Atlantic Commands, and the Air Force for the Alaskan and Continental Defense Commands.

The component commands and the forces assigned to the unified and specified commands continue to be provided, administered and supported by the military departments. This is essential since we require forces organized, trained, and equipped on a *standard* basis so that they

can be employed readily in any part of the world under any type of command.

A specified command is composed of forces from a single Service which has been assigned a Defense-wide military mission—such as the Air Force's Strategic Air Command and U.S. Naval Forces, Eastern Atlantic and Mediterranean.

With the establishment of the new command structure we have come nearer to the President's objective of combat forces organized into truly unified commands—each equipped with the most efficient weapons systems that science can develop, singly led and prepared to fight as one, regardless of Service.

The Office of the Secretary of Defense

Expert civilian advice for the formulation of policy in particular functional areas is provided to the Secretary and his Deputy by the Office of the Secretary of Defense—organized around those areas that are of major importance to the efficient management of the Department of Defense.

The new Act placed special emphasis on the importance of the management of research and engineering activities in Defense. It made clear that in this field the Secretary's office may engage in operations as well as in policy determination. In establishing the Director of Defense Research and Engineering, executive as well as staff functions were contemplated.

The Director was given three principal functions:

First, to act as the principal advisor to the Secretary of Defense on scientific and technical matters;

Second, to supervise all research and engineering activities in the Department of Defense; and

Third, to direct all research and engineering activities that require centralized management.

In addition to the important position of the Director of Defense Research and Engineering, the 1958 Reorganization Act authorized seven Assistant Secretary positions. The law prescribes that one of these Assistant Secretary positions be assigned to the Comptroller; the remaining ones have been allocated by the Secretary to the fields of Health and Medical; International Security Affairs; Manpower, Personnel and Reserve; Properties and Installations; Public Affairs; and Supply and Logistics.

The statutory position of General Counsel, as chief legal officer of the Department of Defense, had already been established in 1953.

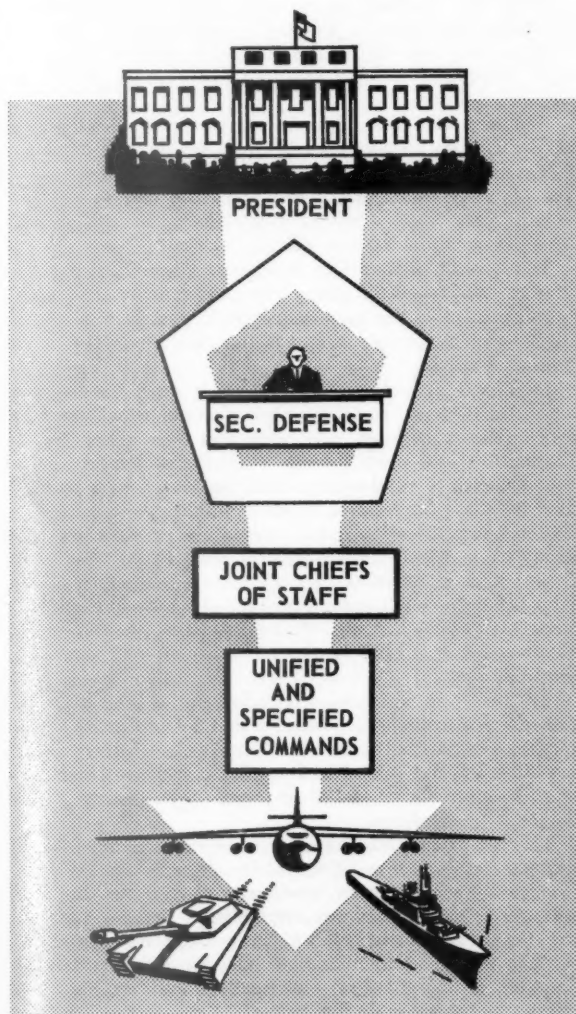
To meet special management needs, Assistants to the Secretary of Defense have been appointed. The statutory Chairman of the Military Liaison Committee operates in this capacity for his advisory functions to the Secretary on atomic energy. Similar positions have been established in the fields of legislative affairs and intelligence.

In general, all these officials perform similar functions in their assigned fields of responsibility:

1. They recommend policies and guidance governing Department of Defense planning and program development.
2. They develop systems and standards for the administration and management of approved plans and programs.
3. They review the programs of the military departments for carrying out approved policies.
4. They evaluate the administration and management by the military departments of approved policies and programs.
5. They recommend appropriate steps to provide more effective, efficient, and economical administration and operation within the Department of Defense.

Coordination between the functional officials in OSD and the operational staffs in the military departments and the JCS is achieved under the existing organization informally,

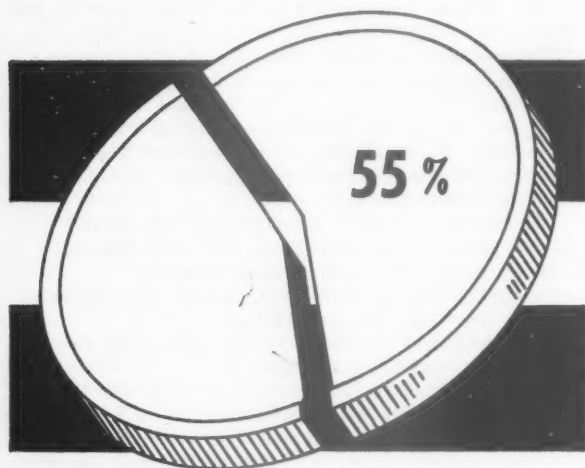
Operational Command...



not in formal committees or boards, whose advice—experience has indicated—often tended to be compromises that only further confused the issue. As a result of a review of the Department of Defense committee structure in the summer of 1958, approximately 200 out of 300 joint DOD Committees were abolished.

To the formulation of policies, the Assistant Secretaries contribute the knowledge of experts in specialized fields, reviewing current proposals against a background of experience gained outside the Department of Defense. Through their coordinating function, they introduce uniformity into the separate proposals of the military departments. Being the Department's representatives with outside agencies, they bring into the review the broader national and international considerations affecting Department of Defense actions.

The job is big . . .



\$43-billion of Federal expenditures

In his reorganization message to the Congress on April 3, 1958, the President stated: "I conceive of these Assistant Secretaries as having full staff functions; that is, they are empowered to give instructions appropriate to carrying out policies approved by the Secretary of Defense, subject at all times to the right of Service Secretaries to raise contested issues with the Secretary of Defense. This is the usual concept of the powers of principal staff assistants. It is essential to the work of the Assistant Secretaries of Defense."

In accordance with these views and the 1958 Reorganization Act, the charters of the chief OSD officials were revised in early 1959 to provide that these officials, in the course of exercising full staff functions, have authority to:

Issue instructions and one-time directive-type memoranda appropriate to carrying out Secretary of Defense policies; and to

Obtain from other Department of Defense agencies whatever reports and information are necessary for the performance of their functions.

It has been the policy of all Secretaries of Defense, particularly in recent years, to keep their immediate staffs as small as possible. As the result of periodic reviews of activities, civilian and military personnel in the Office of the Secretary of Defense, which totaled 2,536 at the peak of the Korean War expansion in mid-1952, has been re-

duced to about 1,700 at the present time. This personnel reduction of more than one-third brought employment in the Office of the Secretary of Defense even below the level existing before the start of the Korean hostilities.

These reductions have been achieved by abolishing the statutory board and committee structure, combining similar or related functions, streamlining procedures, clarifying responsibilities and reassigning to the military departments operational activities that should never have been in the Office of the Secretary of Defense. While the implementation of the 1958 reorganization may require a small increase in personnel, particularly in the research and engineering field, methods of operations, functions, and job justifications will continue to be subject to critical reviews to provide maximum management efficiency.

The Secretary's office also provides support for approximately 900 people in the JCS Organization and about 200 in such special activities as the Advanced Research Projects Agency, the NATO Standing Group, and the Court of Military Appeals.

Conclusion

In summary, the present organization for national security, developed since World War II, reflects trends that became evident during that conflict and have become increasingly so since that time:

First, the requirement for close integration of foreign, domestic, and military policies, as success—not only in a shooting war but also in the cold war—became more and more dependent on the effective coordination of all our national policies.

And secondly, the requirements for efficient integration of the military Services, in Washington as well as in the field—as the increasingly rapid scientific revolution of our age not only multiplied many times the cost of effective defense but also extended the overlap in the combat capabilities of the various military Services.

The current organization represents a step-by-step evolutionary adjustment to these two requirements.

In perspective the key innovation in the present administration of our armed forces is the position of the Secretary of Defense.

In World War II, the President himself handled foreign and military policies, obtained some coordination of such policies through the State-War-Navy Coordinating Committee, and dealt directly with the welter of civilian war agencies in Washington, with the Joint Chiefs of Staff, and with the Secretaries of War and Navy.

The current organization has given the President a principal assistant for all matters relating to the armed forces. It is the task of this official, the Secretary of Defense, to reduce as much as possible the President's administrative burden, as Chief of the Executive Branch and as Commander in Chief, in the management of the defense establishment.

In these circumstances, the efficiency of the organization depends primarily on the extent to which the Secretary's principal assistants—the Secretaries of the military departments, the Joint Chiefs of Staff, and the chief OSD officials—are able to fulfill the staff requirements of the Secretary of Defense.

The full cooperation of all concerned, accompanied by periodic reviews of working relationships to resolve whatever new problems may develop, will provide continued assurance that the Defense organization remains adequate for the achievement of its basic objective—providing, through efficient administration, effective combatant forces "capable of safeguarding our freedom and serving us in our quest for an enduring peace."

THE JOINT CHIEFS OF STAFF

*As the Military brains of DOD, JCS
thinks in terms of the future*

ALTHOUGH Monday morning quarterbacks are already insisting the nation should do some more tinkering with the Joint Chiefs of Staff structure, the Chiefs themselves (and their boss McElroy) feel the present setup is basically a sound, progressive step for the time being.

Before they propose any more reorganization, they want the framework to shake itself down, and are convinced that only more time working with the present system will, in fact, unearth whatever real weaknesses may exist.

The National Security Act of 1947 established the Joint Chiefs of Staff as the principal military advisors to the President, the National Security Council and the Secretary of Defense.

Today, strategic planning and rendering military advice continue to be among the foremost duties of the Joint Chiefs of Staff, but since the passage of the Department of Defense Reorganization Act of 1958 they have taken on important operational staff functions as well. Assisting the Secretary of Defense in his exercise of direction over the unified commands, the Joint Chiefs issue orders by his authority and direction and discharge a day-to-day responsibility for overseeing the operations conducted by the unified commanders.

The JCS came into existence as the result of the decision by President Roosevelt and Prime Minister Churchill (during the ARCADIA Conference—a series of military and political consultations held in Washington just after Pearl Harbor) to establish a supreme Anglo-American military body

for the strategic direction of World War II, to be known as the Combined Chiefs of Staff.

The JCS took form as the U.S. representatives on the Combined Chiefs of Staff, but by early 1942 they were also functioning as corporate leaders for the American military structure. JCS became the primary agency for the coordination and strategic direction of the Army and Navy, advised the President with regard to military strategy, the requirements, production, and allocation of munitions and shipping, the manpower needs of the armed forces, and matters of joint Army-Navy policy.

The Long Evolution

Nevertheless, the functions and duties of the JCS were not formally defined during the war period. The JCS was left free to extend its activities as needed to meet the requirements of war. (The desirability of preserving this useful flexibility was the chief reason offered by the President himself for refusing to issue a basic directive.) With no charter, the JCS organization existed on the basis of its continuing functions, buttressed by the great authority of its members in their individual Service capacities.

Formally established by the NSA statute of 1947, the JCS has undergone a number of changes since. Among them:

1948 Key West Agreement—among other things, authorized the long-standing JCS practice of designating one of their members as executive agent for a unified command, specified

command, or a particular operation or special type of development work.

NSA Amendments in 1949—set up the office of Chairman of the JCS and raised the permissible number of Joint Staff officers to 210.

Public Law 416 in 1952—placed the Commandant of Marine Corps in coequal status with members of JCS when considering matters of direct concern to the Marine Corps.

Reorganization Plan No. 6 in 1953—gave the Chairman responsibility for organizing and managing the subordinate structure of the JCS.

Key West Agreement Revision in 1954—eliminated the provision for designation by the JCS of one of their members as executive agent and substituted the secretary of one of the military departments.

Elimination of Joint Committees in 1958—abolished one formal step in the processing of JCS papers and thereby increased the responsibility of the Joint Staff. At the President's direction, reports produced by the Joint Staff no longer pass upward to a joint committee, in which representatives of the three Services would review them before submission to the Joint Chiefs of Staff.

Since the abolishing of the joint committees, the Joint Staff now circulates the initial draft of its report to the Services for comment. In bringing the report to final form the Joint Staff takes Service replies fully into account, but is not bound to accept differing views. In the few cases where Service views do not agree with the original study, these views are appended to the paper for consider-

The three areas of planning: short-range, mid-range, and long-range

ation. In this way, the original Joint Staff paper is considered by the Joint Chiefs of Staff.

Defense Reorganization Act of 1958—incorporated changes recommended by President Eisenhower and facilitated the further executive actions he had announced. In his reorganization message to Congress, the President said he was convinced that all operational combat forces must be organized into truly unified commands, separate from the military departments and responsible directly to the Secretary of Defense. Accordingly, he intended to shorten the existing chain of command running to the unified commander in the field by eliminating the designation of a military department as the executive agency.

Instead, the line of authority would extend only from the Commander-in-Chief to the Secretary of Defense, whose orders would be issued to the unified commanders by the Joint Chiefs of Staff. With the duty of assisting the Secretary in directing the unified commands added to their other responsibilities, the Joint Chiefs would require a larger supporting organization. The Reorganization Act recognized the need by raising the permissible size of the Joint Staff to 400 officers.

Other Presidential recommendations that were written into the Reorganization Act included the provision making clear that each military chief might delegate major portions of his Service responsibilities to his vice chief while devoting his own primary attention to JCS duties.

The Act deleted from the existing statute the largely meaningless stipulation that the Chairman should have no vote in the decisions of the Joint Chiefs of Staff. (The JCS do no "voting," as such, anyway). It authorized the Chairman to assign duties to the Joint Staff and, with the approval of the Secretary of Defense, to appoint its Director.

Organization and Duties

Under the provisions of the Defense Reorganization Act the Secretary of Defense issued a directive at the end of 1958 spelling out the JCS functions in detail. Besides repeating their statutory designation as principal military advisors to the President, the Secre-

tary, and the National Security Council, the directive spoke of the Joint Chiefs as constituting "the immediate military staff of the Secretary of Defense" in the chain of operational command.

The directive called on the Joint Chiefs to "prepare strategic plans and provide for the strategic direction of the armed forces, including the direction of operations conducted by commanders of unified and specified commands" and to discharge "any other function of command" directed by the Secretary of Defense. They would review the plans developed by the unified commanders, recommend changes in the establishment and force structure of unified and specified commands, and suggest which military departments should be assigned responsibility for providing support to such commands.

The other functions of the Joint Chiefs of Staff comprised the following: (1) prepare integrated logistic plans, and plans for military mobilization, (2) review major personnel, materiel, and logistic requirements of the armed forces in relation to strategic and logistic plans, (3) recommend to the Secretary of Defense the assignment of primary responsibility for any function of the armed forces requiring such determination and the transfer, reassignment, abolition, or consolidation of such functions, (4) provide joint intelligence for use within the Department of Defense, (5) establish doctrines for unified operations and training and for coordination of the military education of members of the armed forces, (6) provide the Secretary of Defense with statements of military requirements and strategic guidance for use in the development of budgets, foreign military aid programs, industrial mobilization plans, and programs of scientific research and development, (7) participate, as directed, in the preparation of combined plans for military action in conjunction with the armed forces of other nations, and (8) provide the United States representation on the Military Staff Committee of the United Nations and, when authorized, on other military staffs, boards, councils, and missions.

To assist the Joint Chiefs in meeting these responsibilities the Joint Staff was expanded and its elements were

realigned and redesignated. The Reorganization Act prescribes that "the Joint Staff shall not operate or be organized as an overall Armed Forces General Staff and shall have no executive authority." It should "operate along conventional staff lines to support the Joint Chiefs of Staff." In broad outline the Joint Staff as organized today does, in fact, have much of the familiar appearance of a commander's staff.

The Joint Staff has the following major components: J-1 Personnel Directorate, J-2 Intelligence Directorate, J-3 Operations Directorate, J-4 Logistics Directorate, J-5 Plans and Policy Directorate, J-6 Communications-Electronics Directorate, and a Joint Military Assistance Affairs Directorate. Two other agencies, the Joint Programs Office and the Joint Advanced Study Group, complete the Joint Staff.

Other elements of the JCS organization include the Joint Strategic Survey Council, the U.S. Representatives on the Military Staff Committee of the United Nations, and the U.S. Representative on several military agencies of the North Atlantic Treaty Organization. All of these report directly to the Joint Chiefs of Staff. Also within the JCS organization, operating under the general supervision of the Director of the Joint Staff, are the Joint Secretariat, the Special Assistant to the Joint Chiefs of Staff for National Security Council Affairs, the Joint Meteorological Group, and the U.S. military delegations to various international bodies, such as the Inter-American Defense Board.

JCS Planning

The strategic planning activities of the JCS are governed by a "Joint Program for Planning." This program provides for annual development or revision of three basic guidance instruments—the Joint Long-Range Strategic Estimate, the Joint Strategic Objectives Plan and the Joint Strategic Capabilities Plan.

Preparation of these basic planning documents engages the efforts of all components of the Joint Staff. For instance, while final responsibility for preparation of the Joint Strategic Objectives Plan rests with the Director, J-5, he performs the task in collaboration with the Directors of J-2, J-4, and J-6, in coordination with the Directors of J-1, J-3, Military Assistance Affairs, and Joint Programs Office, and with the concurrence of the Joint Strategic Survey Council on the strategic concept underlying the plan.

The purpose, scope and timing of the three basic joint guidance instruments are:

A Joint Long-Range Strategic Estimate

(1) Purposes:

(a) Provides a broad-background strategic appraisal which will assist in the development of military policies, plans and programs.

(b) Provides assistance in the review of existing and proposed national security objectives and policies.

(2) **Scope:**

(a) Appraises, in broad terms, world situations affecting U.S. security that may exist or develop during the period of the estimate, including possible national and bloc alignments.

(b) Considers the factors and trends which may influence these nations or alignments to undertake military, economic, political or psychological courses of action which could affect the U.S. security and well-being.

(c) Considers the type and nature of these courses of action, probable geographic areas of international conflict and the weapons and techniques likely to be employed.

(d) Appraises possible U.S. courses of action to counter potential developments in the world situations which could adversely affect U.S. security and well-being.

(e) Develops the strategic concepts and considers the military posture required to support U.S. long-range national policies to accomplish the basic national objectives of the United States.

(3) **Timing:** The estimate covers a period of 4 years, beginning on 1 January, approximately eight years after its consideration and dissemination by the Joint Chiefs of Staff. (This long-range appraisal is necessarily an estimate rather than a plan. In their final action the Joint Chiefs "note," rather than "approve," the estimate.)

B. Joint Strategic Objectives Plan

(1) *Purpose:*

(a) Translates national objectives and policies into military objectives which are reasonably attainable, and strategic concepts and basic undertakings to support these military objectives.

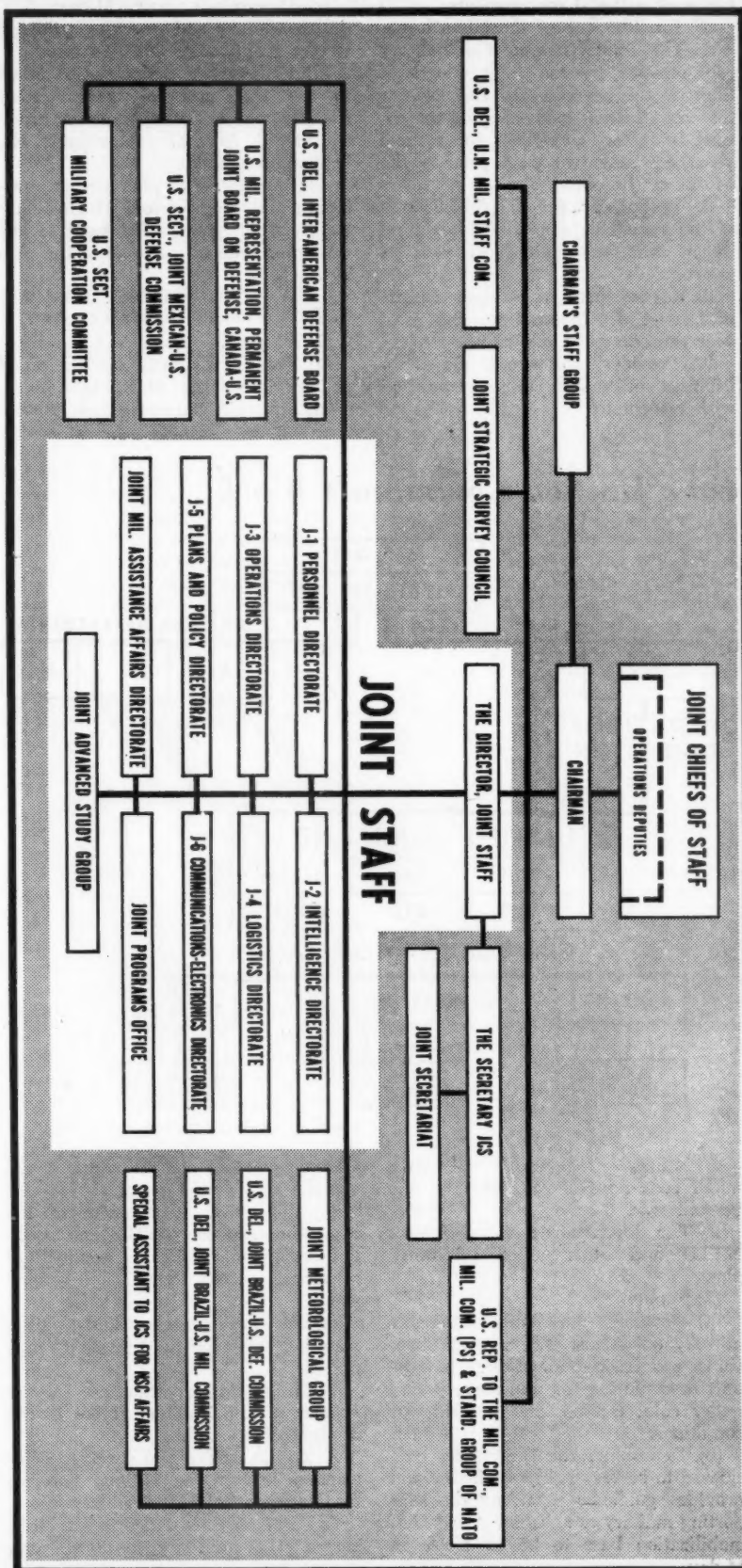
(b) Provides strategic planning guidance in the mid-range period for conditions of cold, limited, and general war.

(c) Provides guidance for the determination, disposition, employment and support of U.S. military forces considered necessary to support the strategy delineated in the plan.

(d) Estimates the military forces of Allies considered desirable to support the U.S. military strategy.

(e) Provides guidance for Service logistic planning in sufficient detail to:

1. Determine the scope of logistical effort required by each Service.
2. Provide a basis for industrial mobilization planning and the compu-



tation of material requirements.

(f) Provides one of the bases for:

1. The annual statement of military requirements by the Joint Chiefs of Staff to the Secretary of Defense for his consideration in developing his annual budgetary guidelines for a fiscal year beginning two years prior to the M-day of the plan.

2. The preparation and justification of the annual departmental budget requests for the same fiscal year as above.

3. Reassessment of military aspects of budget development for the fiscal year preceding the one above.

(g) Provides assistance in the establishment of a U.S. military position with respect to:

(c) Determines post M-day U.S. military forces and provides guidance on the mobilization base required.

(d) Estimates, for each nation allied to the U.S. and for certain other friendly nations, the military forces considered desirable to support the U.S. military strategy.

(3) *Timing:* The plan covers a 36-month mid-range period, which begins 1 July, four years subsequent to the scheduled date of approval of the plan by the JCS.

C. Joint Strategic Capabilities Plan

(1) *Purpose:*

(a) Translates national objectives and policies into terms of military objectives, strategic concepts, basic under-

1. Military assistance to Allies.

2. The development and review of NATO and other allied short-range plans.

(2) *Scope:*

(a) Develops military objectives, strategic concepts, basic undertakings and tasks for cold, limited, and general war in the short-range period, in consonance with actual U.S. military capabilities.

(b) Provides for the assignment of available U.S. military forces and indicates possible augmentation forces available for contingency planning.

(c) Determines the feasible post M-day U.S. military expansion and deployment to pursue the most advantageous strategy and accomplish the national objectives.

(d) Estimates the military forces available to support the U.S. military strategy from each nation allied with the U.S. and from certain other friendly nations.

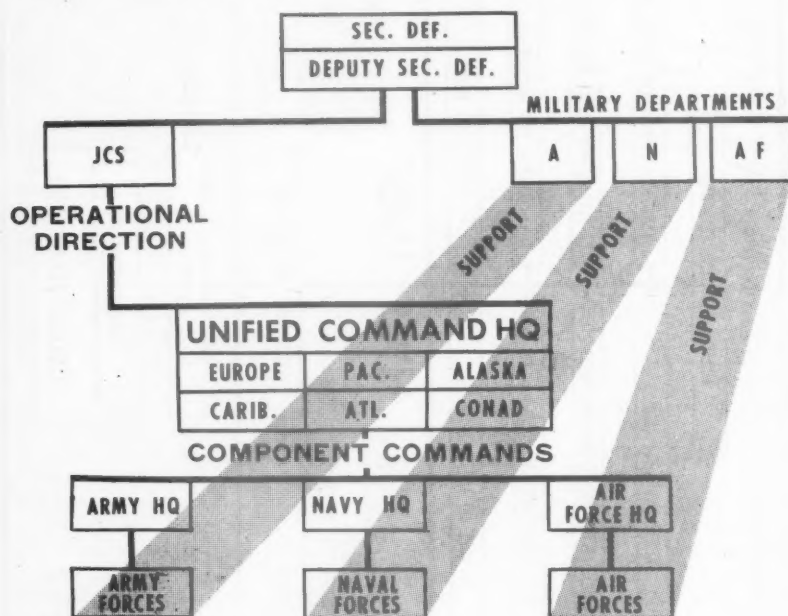
(3) *Timing:* The plan covers a 12-month short-range period, which begins 1 July following the scheduled date of approval of the plan by the Joint Chiefs of Staff.

The approved provisions of these three basic planning documents often govern the advice given by the Joint Chiefs to the Secretary of Defense and the comments they provide from the military point of view on matters before the National Security Council. Guidance is drawn from these three documents for a great deal of further planning within the Joint Staff, the unified and specified commands, and the Services.

In order that the attention of the Joint Chiefs of Staff may be centered on such important matters as the annual study and approval of these basic planning documents, JCS procedures designed to relieve the Joint Chiefs of the consideration of relatively minor problems are constantly being improved. A great body of work is disposed of by decisions made in the name of the Joint Chiefs of Staff by their Operations Deputies.

Many of the more routine reports of the Joint Staff Directorates are dealt with under an automatic procedure that certifies them as approved by the Joint Chiefs if no objection or request for discussion is recorded with the Joint Secretariat during a set time period following publication. Queries from the unified commands about the interpretation of existing directives can usually be answered quickly and directly by elements of the Joint Staff. Thus, only about 25% of the problems referred to the JCS organization from all sources reach the Joint Chiefs acting as a corporate body for consideration.

How Unified Commands Work . . .



1. Military assistance to Allies under conditions of cold, limited, and general war.

2. The development and review of NATO and other allied mid-range plans.

(2) *Scope:*

(a) Develops reasonably attainable military objectives, with strategic concepts and basic undertakings to support them during the mid-range period under cold, limited, and general war conditions.

(b) Determines the U.S. forces considered to be reasonably attainable and provides guidance regarding the supporting military establishment and U.S. mobilization base to be on hand on M-day.

takings and tasks that are within actual capabilities.

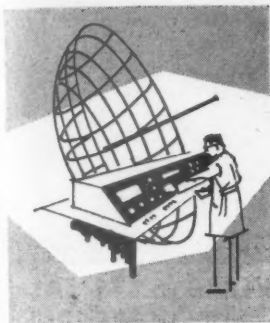
(b) Constitutes a directive to the commanders of the unified and specified commands for the conduct of operations in cold, limited, and general war.

(c) Provides strategic and logistic planning guidance for the short-range period:

1. To the Military Services for the support of U.S. military forces in the conduct of operations.

2. To the unified and specified commanders and to the Military Services for the support of Allied military forces.

(d) Provides assistance in establishing a U.S. military position with respect to:



RESEARCH & ENGINEERING

*The unified approach to
future weapons and equipment*

THERE has probably never been a more powerful across-the-board research team than the one that Department of Defense has assembled to get the best possible research, development, test and evaluation in the world, and to get the U.S. first crack at the military uses of space.

Headed by the Director of Defense Research and Engineering, the roll call of participating agencies offers a group of scientific powerhouses any one of which alone would be impressive. With DDRE and his office as team captains, the list reads like this:

Advanced Research Projects Agency—a direct result of the Sputnik hysteria, but an organization that has rapidly gained maturity, and one which will continue to play an increasingly important role in U.S. space work and general research.

Weapons Systems Evaluation Group—a group which "prefers anonymity" but one charged with one of the most vital evaluation jobs in the Pentagon—checking the weapons systems as they apply to work and planning of the JCS and DDRE to see how they will fit in the future.

Institute for Defense Analyses—in some ways similar to the Air Force's RAND Corp., this group of scientists under contract provides the vital technical support for both ARPA and WSEG.

In a cold war being fought largely on the drawing boards, there is no way of overestimating the work handled by these agencies—or more to the point, the weight of the responsibilities that they must carry.

Probably the single most important job handled by the Director of Defense Research and Engineering is seeing that no worthwhile defense research projects slips through the fingers of the various defense research agencies. It is a matter of overseeing rough-

ly \$5-billion worth of research work within DOD.

It is a fair measure of the importance with which research work is held within DOD that the Director of Defense Research and Engineering has been given the power of decision over the various research programs throughout Defense Department. In making this move, the feeling was that the many programs coming up for decision are far too complex to rate anything less than full-time consideration by a man who has been working with them right along. In other words, a decision by the Secretary of Defense, based on the advice of an Assistant Secretary, would not offer the assurance that the final word of a full-time Director would.

In his ability to make decisions in this manner, Dr. York holds a unique position within DOD. And it is probably because of this uniqueness—coupled with the importance of the job—that one of his first moves when he took over the new position was to realign his staff functions into a more thoroughly functional organization.

Under the former Assistant Secretary for Defense Research and Engi-

neering, the organization reflected areas of work covered by engineers and scientists in DOD and the services. Electronics, Aeronautics, Ordnance and Maintenance Engineering (now transferred to Supply and Logistics) were examples of the former divisions. Also, there were offices covering research and engineering work in Human Sciences and Atomic/Biological/Chemical warfare.

Because of the decision-making responsibility vested in him, the new DDRE felt that he needed to take a look at the various research projects not only as they fit in with others like them, but also in relation to the overall defense jobs that they would eventually fulfill. The obvious answer was a new set of offices, covering the total areas in which the end-products of research work would be used.

These new offices are the six Operational Systems Offices, tentatively established shortly after Dr. Herbert York was sworn into his new position. Under the present arrangement, these offices will cover (1) Air Defense, (2) Tactical Weapons, (3) Strategic Weapons, (4) Communications, (5) Undersea Warfare, and (6) Special Projects. Each of the offices is headed by an Assistant Director of Defense Research and Engineering, and each maintains a small staff—about four top professionals in their fields. Both civilian and military are represented on these staffs, and besides the necessary research and engineering talent, the Assistants to the Director will have Operations specialists on their staffs.

The job will be to scan the many research projects proposed or underway in Defense Department, and look for specific applications in, for instance, Air Defense. Where previously the major concern for the B-70—as an example—would have been in the Aeronautics office, the program now gets a second screening. Drawing on

The People

Director of Defense Research and Engineering: Hon. Herbert F. York

Deputy Directors:

J. B. Macaulay

H. A. Wilcox

Director, Weapons Systems Evaluation Group: VAdm. J. H. Sides

Director of Research, WSEG: C. A. Boyd
Director, Advanced Research Projects Agency: Roy W. Johnson

Deputy Director: Maj. Gen. Don Ostrander
Chief Scientist: George P. Sutton

Ass't Dir., Administration: L. P. Gise
Advanced Research Projects Division, Institute of Defense Analyses:

Space Technology: David Young

Ballistic Missile Defense: Harold Beveridge

Solid Propellants: John Kincaid

Organizing for Central Control



technical data supplied by the Aeronautics office, and from the other offices throughout the DOD who would have pertinent information, DDRE would turn the program over to the Assistant to the Director for Strategic Weapons, where it would be studied in relation to other strategic systems, such as Titan, Minuteman or Polaris.

Because it has found itself in the weapons research evaluation business, DDRE will be drawing more heavily than ever before on the Weapons System Evaluation Group. It will also be necessary for the office to spend a greater percentage of its time on the engineering aspects of the programs it reviews, although it is not likely that the research half of the director's title will fall by the wayside.

Another indication of the broadened scope of the responsibilities of the Director of Defense Research and Engineering is that, in his own words, "We are going to see that there is more exploratory work, and that less of that kind of work becomes systems work. We have to explore as many areas as possible, but it is difficult to stop exploratory efforts. When a contractor carries on extensive research work on one project, he tends to think that his way is the only way to solve the problem."

The trend is for the Director to look beyond the purely research aspects of a given program, and see what the long-term implications are going to be. In addition to asking "Will it work?" and "Is there someone who can do it?" DDRE now must also ask "What will this program mean in terms of

the total defense picture, the costs involved, and other research projects currently in the mill?"

As top manager in the largest research, development and engineering program that this country has ever known, the Director of Defense Research and Engineering is faced with some of the most complex and expensive decisions that could be imagined. And the implications of practically any of these decisions could make the difference in survival of the nation.

Two Key Jobs

But if calling the shots on the big ones is an important part of the work handled by DDRE, equally important, according to Dr. York, is "to see that programs not as glamorous receive sufficient planning . . . We must make sure that no important projects are left out—or that none slip through our fingers because they are only half important to two services."

With the great majority of the present Defense research work being funded and monitored by the three services, a major part of the job of

DDRE is seeing that nothing is left out, and that the more important programs receive the emphasis that they deserve.

By covering the vast area of research work from both a technical viewpoint and an operational systems viewpoint, the top manager for Defense Research and Engineering can be sure that the \$5-billion under his overall control each year is spent in the most efficient possible manner, and that the many programs involved get the best possible overall treatment.

To help him get the job done, and to provide him the specialized staffing he needs in his work, DDRE relies on a trio of proven and effective organizations. ARPA, WSEG, and IDA work to provide judgment evaluations, advanced research and technical knowledge that must be poured into any successful research decision. Although only WSEG reports directly to DDRE from an organization standpoint, all of them perform tasks which are absolutely essential to the Director's job, and for that reason, they must be considered in this context.

Advanced Research Projects Agency

"WE'RE a handy kind of outfit to do the sort of work that's hard to get done." So says Roy Johnson, Director of the Advanced Research Projects Agency. It is because of this, and because of the definite need for an operating agency which is not tied to the day-to-day problems of running

a military service that the Advanced Research Projects Agency has outlived, and in fact grown stronger, in spite of the many predictions for its demise.

The aim is to leapfrog the state of the art, and to do this, ARPA relies on its own relatively small management staff, outside contractors, the

ARMED FORCES MANAGEMENT

services, and a hard core of scientists from Institute for Defense Analyses.

ARPA receives project assignments directly from the Secretary of Defense upon recommendation by the Director of Defense Research and Engineering. In taking care of these assignments, ARPA must determine the present state-of-the-art, and then decide which way it will move to best serve the interests of Defense Department. After considering all available material on the project, ARPA usually hands out a work order to one of the military departments, who in turn, either handle the work themselves or pass it on to a civilian contractor.

ARPA is a line agency reporting to the Secretary of Defense, and working on a project basis. The areas covered are within three general categories: (1) research not identified with a specific military requirement, (2) research relating to primary functions of two or more of the military services, and (3) research which for other reasons is better handled by an agency other than one of the military services. As soon as a given project achieves demonstrated feasibility, it is turned over to one of the military departments for development as a weapons system.

ARPA makes available the necessary funds for the various projects that it handles from its own budget, and provides overall technical management of approved projects through its Technical Operations division.

Besides the Technical Operations division, ARPA contains a Policy and Planning division and a Financial Management and Reports division. Because the total ARPA office is relatively small, the organization is able to stay flexible and fairly informal.

The thirty to thirty-five technicians who are on the ARPA payroll work with the approximately 45 from IDA (half of whom are on a loan arrangement) on a panel basis, with four to six scientists on each panel. Points out L. P. Gise, Assistant Director of ARPA, "the real problem is making the right technical decision." The IDA scientists are assigned in three general groups—space technology, ballistic missiles and general science.

They work with the six panels or branches of the Technical Operations Division of ARPA itself. These are (1) a Satellite branch, (2) Missile Engine and Propellant branch, (3) Communications and Tracking, (4) Special Projects branch, (5) Exploratory Research and Reliability branch, and finally, (6) a Ballistic Missiles Research and Engineering branch.

Perhaps the one project which is receiving the heaviest emphasis at this point is, according to ARPA Director Johnson, "How do we defend ourselves against enemy ballistic missiles? Right now, if they had the missiles and wanted to do it, they could murder us." Also important in ARPA's present planning are improved solid missile fuels and more and better military uses for satellites.

The Space Agency?

But in spite of the publicity that ARPA has received as the nation's space agency, this is not necessarily where the heaviest effort goes. Although two-thirds of the ARPA budget is spent on space booster projects, only one-third of its personnel are working in this area. Comments Assistant Director Gise, "We are trying as hard as we can to live down this 'space agency' tag. We only work on feasibility studies. We're not interested in the big hardware programs."

Although space-racing would appear to be an important part of many of ARPA's programs, it could quite logically be regarded as an incidental factor. If a satellite-based very early warning system is the best way of spotting and tracking incoming missiles, then by all means it should be used. But the satellite is important only insofar as it contributes to the early warning problem.

In making the final decision on a given project, one of the most important groups within ARPA is the Program Council, a "very informal, but very effective" committee, according to Assistant Director Gise. Composed of the Deputy and Assistant Directors of ARPA, the three division heads, the ARPA chief scientist and a representative from the office of the Defense General Counsel, the Program Council must make sure that all of the necessary management considerations are included in a given proposal before it gets final approval. The criteria considered by the council include costs, where the project will fit in overall defense policy, and generally the non-scientific aspects of the project under discussion. Meeting once a week, the Program Council is one of the most important groups in ARPA.

To get an idea of the broad fields of interest in which ARPA must operate, it is only necessary to look at the many different approaches which are being used in the three broad areas of ARPA work—Advanced ballistic missile defense, General science projects, and Military space technology.

Under the first of these, ARPA is working in specific fields covering identification and tracking, interception, kill mechanisms, range instrumentation, conceptual studies and systems analyses, and very early warning. Under the general sciences projects, ARPA covers advanced propellant chemistry (where a 20% increase in specific impulses is expected in the near future), and basic research in materials, with heavy emphasis on metallurgy, ceramics, solid state physics, inorganic chemistry and high temperature science.

Under military space technology, ARPA probably has its most extensive area of activity, by number of projects. Communications, navigation, reconnaissance, space propulsion, auxiliary power, detection and tracking, and advanced systems studies make up a good part of the work. In another area of its military space work, ARPA is working on research, experimentation and development of a system based on a satellite or other space vehicle capable of producing accurate world-wide geodetic data sufficient to establish launch and target points required for missile systems.

It is interesting to note that the vast majority of the forgoing programs do not have a built-in need for their own booster. This means that the recent DOD decision which named Air Force as the sole Defense Department agency to be responsible for space boosters will have little or no effect of the work that ARPA is doing now, or will do in the future.

Out of Space

It simply means that ARPA will go to the Air Force when it needs a booster to put, for example a communications satellite in orbit. Air Force will then procure for ARPA the vehicle it needs to put its satellite in orbit. But as far as ARPA is concerned, the end result will be a communications experiment—not a space experiment. With the recent transfer of ABMA, there is also a strong possibility that much of ARPA's work will be handled by National Aeronautics and Space Administration on a similar basis in the future.

The major reason behind this is that there are several strong indications that Defense Department will be getting out of the space booster business entirely. First, as ARPA Director Roy Johnson points out, "the very smallness of our space exploration vehicles is an indication of a difference in philosophy with the Russians. In many respects, we are more than matching their big-

ness with miniaturization in our vehicles. An excellent example of this is that original plans for the Atlas called for a 600-700,000 pound thrust vehicle. When we got the breakthrough on the thermonuclear warhead, we knew we wouldn't need that much and cut the program back to its present size." The implication is that as space exploration booster needs grow, the military will work to get smaller and smaller weapons systems, as is already shown by Minuteman and Polaris.

Second, and again quoting ARPA Director Johnson, "Booster development is not the big job." To parody the cigarette advertisement, it's what's up front that counts, or to stretch the metaphor, the most important quarter-space-vehicle in scientific history is the nose-cone of the vehicle and what it carries. It is relatively easy—given the time and money—to build big boosters, as the Russians have proved. But the biggest booster in the world is a candidate for charges of inefficiency if it does not carry a payload that pays off.

Because it is nearly impossible for the Defense Department to get money unless they can prove a military requirement, the idea of a pure research out-

fit—such as NASA—to provide the basic hardware for their various research programs appeals to many of the more clear-headed Pentagon managers connected with R&D work.

Finally, in an oblique sort of a way, the precedent has been set for this sort of an arrangement, with the present arrangement giving Air Force top spot in the space booster business. The record of cooperation between NASA and ARPA would easily be carried one step farther the foregoing way of doing business, and it would seem to be equally easy for the services to follow suit. And of course the ABMA transfer gives NASA control of what is perhaps the most successful present U.S. space booster exploration facility.

But no matter who is providing the boosters for the ARPA space capsules, it is certain that Advanced Research Projects Agency will continue as one of the major contributors to the future of the three services, and the Defense work of the nation as a whole.

And if ARPA was born of Hysteria out of Sputnik, it has matured well, and will maintain its record of making liars out of the many would-be prophets who predicted its early end.

Weapons System Evaluation Group

ALTHOUGH the majority of the work handled by Weapons System Evaluation Group is done for the Joint Chiefs of Staff, the role it plays in connection with the research work of Department of Defense, and Director of Defense Research and Engineering in particular, is important to the point of being necessary in any consideration of DDRE and its related agencies.

According to Director VAdm. John H. Sides, "one might almost say that all you have to do is name it, and we have worked or are working on some phase of it." The easiest way of describing the WSEG is to call it Defense Department's Operations Research Group.

WSEG is charged with providing DOD with comprehensive, objective, and independent analyses and evaluations under projected conditions of war, which will include but not be confined to: (1) present and future weapons systems, (2) the influence of present and future weapons systems upon strategy, organization and tactics, (3) the comparative effectiveness and costs of weapons systems, and finally (4) to make available to the Department of Defense timely advice and assistance to aid decisions in the allocation of resources for development of the most effective combination of weapons systems.

Because of the amount of emphasis

that is placed on the last phase of the mission, it is not inaccurate to say that Weapons Systems Evaluation Group, except in the broadest sense, is a misnomer for the approximately 140-man technical and military staff working under VAdm. Sides.

The job is not by any stretch of the term confined to Weapons Systems Evaluation. Says Dr. C. A. Boyd, Scientific Director for WSEG, "We have to have Operations Research Work, but we have to have more than that. We must look as far ahead as we can . . . not even in terms of years. When something happens, we have to be able to say 'This is the impact of the thing'."

Boyd continues: "There's no recipe for weapons systems evaluation. You can't put it in numbers. It requires a continual examination of the country's strategic posture, and you always need new ideas. You have to think about it, and you have to measure the impacts. Few people realize it, but one of our most important groups is concerned with social sciences—manpower, economics, psychology and politics. We have to examine these areas."

"There is no single measure for a weapons system. We have to think about cost, availability and effectiveness. It all depends on the situation. The job is to be helpful, and to produce a true, factual picture. Our big aim is to come up with an unbiased

comprehensive, objective analysis of what we're asked to turn out."

Organizationally, WSEG is anything but formal. The character of the work, and the relatively small staff, enable the scientists and military men working WSEG to operate on a no-barriers, free exchange of information basis. The nature of WSEG's work precludes confinement to a particular methodology. An indication of the value of this sort of work is pointed up by Dr. Boyd. "We don't maintain an advanced studies group. Everybody that works here has to be concerned with the future. You never know where the ideas will come from, and we stand or fall on ideas. We keep a flexible organization, forming around the various projects we have. We would much rather have cross-fertilization of ideas than an organization that looks good on paper and doesn't produce."

Like ARPA, WSEG relies on Institute of Defense Analyses for its technical personnel (from Dr. Boyd on down). It was in connection with WSEG that IDA was originally set up, and in April 1956, when IDA was formally incorporated as a nonprofit organization, it was with WSEG in mind. The function of the scientists from IDA is to bring the necessary technical knowledge to bear on the advisory papers issuing from WSEG.

On the other hand, according to Dr. George Pugh, "The service members of a given project are responsible for maintaining clear channels of information flow from their own Services so that necessary information for the projects can be obtained when required. They bring to the project the experience gained in their respective services. As a result of this exchange of information, we know when our conclusions are likely to be controversial and are able to prepare our position more effectively. A slightly more subtle advantage of the military membership is the editorial review which all WSEG documents automatically undergo. This review has the effect of removing ambiguities in the documents that might result in misunderstanding by any service and unnecessary controversy when the paper reaches the Joint Chiefs of Staff."

In the light of the foregoing, it is worth noting that the military staffers with WSEG are deliberately picked to maintain equal representation of the three services, and that the majority are Colonel, Navy Captain or above. The representation from each service is designed to reflect the various military specialties that the service has to offer, and at least one representative from every service is assigned to each project, if only on a part time basis. Comments Dr. Pugh, "I suspect

that most outsiders would be surprised at the high degree of objectivity that is maintained in the groups, despite frequent honest differences of opinion."

About two-thirds of the studies handled by WSEG are generated by the Joint Chiefs of Staff, with the remainder either coming from DDRE, or in a few instances self-initiated within WSEG. The office generally does not handle projects which affect only one service.

Again to quote Dr. Pugh, "We are likely to be deeply involved in the doctrine of operation for the total system—and in the choice of the appropriate mixture of weapons in the total system. This is a field in which quantitative parameters are particularly difficult to find. Consequently, more of our work is done in qualitative terms than is the case for other operations analysis groups. As time goes on, and our experience and staff increases, we are finding it possible to look deeper into the systems and a larger portion of the work is being done in quantitative terms.

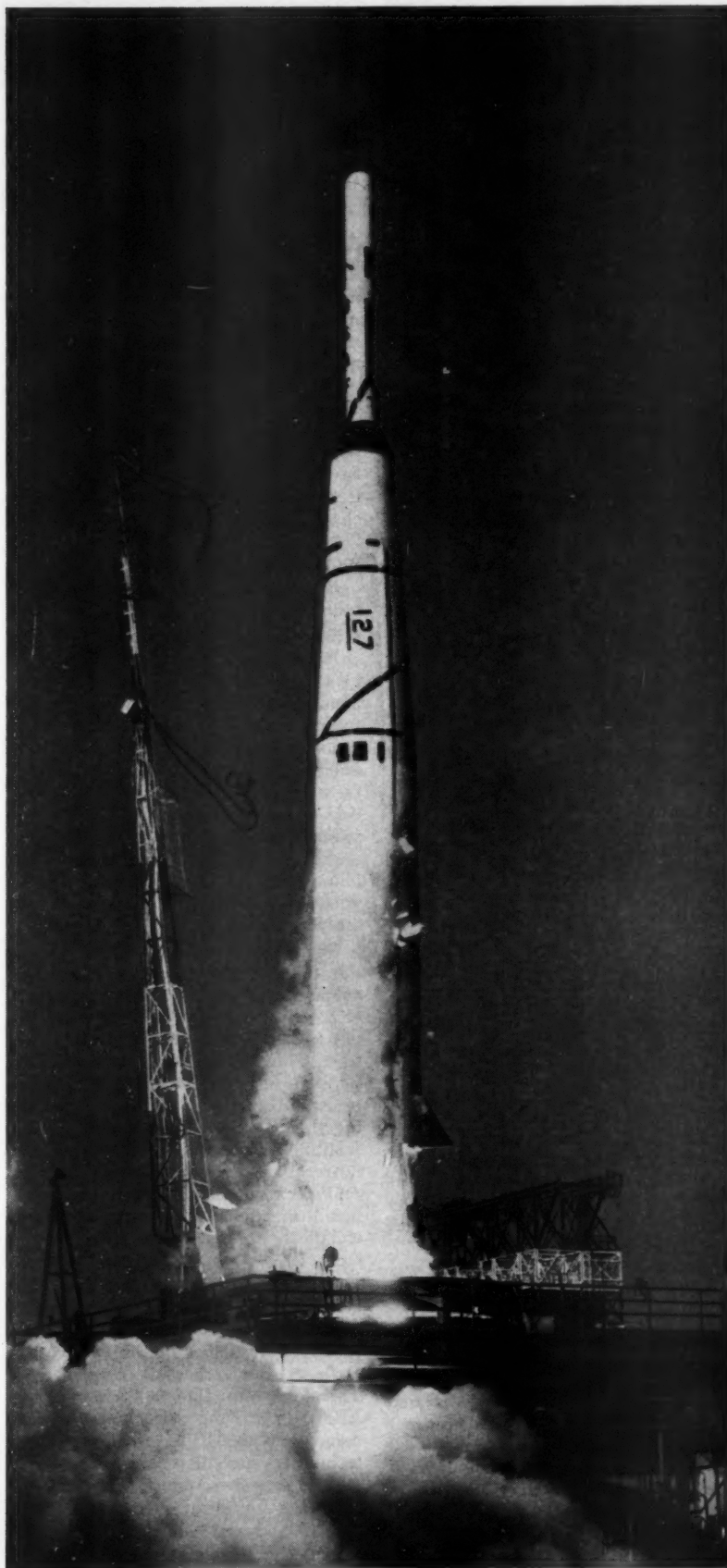
"The magnitude of tasks assigned us vary greatly—from short quick studies designed to furnish information in a very short time which will assist in arriving at decisions affecting a narrow or restricted facet of a larger problem—to broad deliberate studies covering the entire defense posture over a long period of time.

The Changing Character

"In general, the character of work at WSEG has been undergoing a change from the original concept. Instead of a preponderance of a few very long-range studies which often take so long that the results have lost much of their meaning, we have a good mixture of basic studies and of tasks which are assigned to us with rather close deadlines which must be met . . . For studies of this type our policy is to provide the planner with the best and most complete answer possible at the decision date and to accompany it with all the doubts and uncertainties that may exist at the time to allow planners to properly hedge their decisions. We provide this information even though we know we may have to change our recommendations in the near future as more accurate information becomes available."

One of the first things that Director of Defense Research and Engineering Dr. Herbert York was absolutely sure about when he took over his present job was that the amount of the work delegated from his office to WSEG

Keeping Defense science first in the missile race is much of the job.



would increase. And a general status report by WSEG Director VAdm. Sides would seem to confirm this: "I don't foresee any basic change that would be required in our organization, although our size might have to grow. We are definitely receiving more R&E work

than we used to. For instance we have done several jobs of great interest to ARPA. But we cannot grow or change overnight. We have to work ahead to maintain the quality our organization has had in the past, and must continue to have in the future."

Institute for Defense Analyses

A NON-PROFIT organization originally set up by Defense Department in cooperation with Massachusetts Institute of Technology, the Institute for Defense Analyses is a brain-trust for the Defense Department in about the same way that the RAND Corp. is for the Air Force.

The three main jobs IDA handles are for ARPA, WSEG, and Department of Defense. It naturally follows that the three divisions of IDA are the Advanced Research Projects Division, the Weapons Systems Evaluation Division, and the Communications Research Division. In addition to the three regular areas of work, IDA can and does handle such short-term projects as the Draper Report on Military Assistance Programs and the Gaither Report.

In connection with WSEG—for which IDA was originally formed—the Institute provides about a hundred technical personnel, who lead the projects handled by that agency. For DOD, the work done by IDA is in the areas of cryptology and cryptanalysis—"mostly mathematical research," according to one IDA spokesman. On this project, IDA is currently working from 5-10 years ahead of current techniques.

For ARPA, IDA works with specific programs—such task assignments as "What's the best way to space?" The Institute offers nothing in the way of a decision, but rather provides the technical evaluation studies needed for the decision that will be made.

All IDA work is done on assignment and the major advantage is that the non-profit group can offer DOD studies which have no built in bias.

Institute for Defense Analyses was formed in 1955 by five universities: California Institute of Technology, Case Institute of Technology, Massachusetts Institute of Technology, Stanford University and Tulane University. (Soon joining will be Pennsylvania State and University of Michigan.) Management of the Institute is handled by a board of trustees, composed of representatives of the five universities, and leaders from other universities and other areas.

Besides the Board of Trustees, IDA

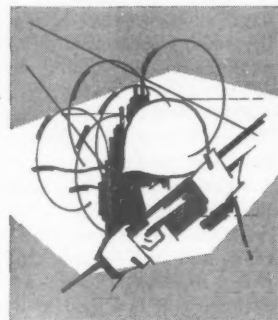
maintains a Professional Advisory Committee, which works with the corporate officers and the divisions. The Committee is composed of various Trustees with particular professional qualifications in IDA's work areas who are able to devote time to the work, and of persons who are outside of IDA, but have similar qualifications. Reporting to the Board of Trustees, the group is charged with surveillance over the professional quality of IDA's various responsibilities.

Beyond this, and the technical divisions, IDA maintains a structure similar to that of most corporations.

By IDA's definition, the job they handle for WSEG is "to provide independent analyses and evaluations of the technical aspects of (the) broad problems and of the potentialities of science and technology for contributing to their solution. Through the application of the knowledge and methods of science, we assist in clearing away the underbrush of minor considerations, in illuminating major considerations, in pointing the way toward optimum answers."

Regarding ARPA, the Institute has this to say: "(We) provide technical support to ARPA under a contract with the Secretary of Defense patterned after the earlier WSEG contract. Thus the resulting means of support are also similar, through a group of scientists and engineers brought together by IDA as a Division of the Institute's organization, to examine the far-reaching areas of research under ARPA's responsibility and to recommend directions, priorities of attention, technical approach, methods of attack . . .

"In its research operations more generally, ARPA has numerous points of interest in common with WSEG and with the Office of the Director of Defense Research and Engineering. Therefore, the IDA staff supporting ARPA, in arriving at technical recommendations to ARPA and in supplying technical surveillance of on-going ARPA programs, must work closely with the technical staffs of NASA, WSEG and the Director of Defense Research and Engineering."



WHEN you talk about Manpower, Personnel and Reserve, you inevitably get into an area that is near and dear to everyone working with Department of Defense. Because the work done in this office is bound up so closely with the fortunes of all the people working in DOD, the job is extremely complex, and of a most vital nature.

With this in mind, it is surprising that the organization in the office of the Assistant Secretary of Defense for Manpower, Personnel and Reserve has changed as little as it has in the past two years. Two of the top policy offices have been merged, and the Fiscal and Supply Division of the Armed Forces Information and Education Office has been re-named the Comptroller Division, but beyond that the office remains virtually unchanged.

The merger combining Office of Manpower Utilization and Office of Manpower Requirements—simply pulled together two functions that have a large amount of common ground to cover, and two offices that had formerly had to work with extremely close cooperation.

Providing policy advice to the Assistant Secretary are three Boards or Committees: the Armed Forces Chaplains Board, the Reserve Forces Policy Board, and the Defense Advisory Committee on Women in the Services. The most important of the three—in that it affects the most people—is the Reserve Forces Policy Board. This advisory group provides the Secretary of Defense with policy advice regarding coordination of programs, location, composition and type of units, and location, size and type of training facilities for DOD reserve components. The group also works with status reports on the reserves, and makes recommendations on budget estimates and legisla-

MANPOWER, PERSONNEL & RESERVE

The shrinking ceiling and the need for skills

tion for Reserve Forces activities.

Within the actual framework of the office of the Assistant Secretary there are seven offices, covering all aspects of Manpower, Personnel and Reserve activities.

The office of personnel policy recommends with Defense Department policies, programs and practices for civilian employees of DOD and members of the regular and reserve forces of the Army, Navy, Air Force and Marine Corps. It must assure effective implementation of DOD personnel policies, programs and practices by military departments and other DOD agencies. It works with Defense/State community relations, the military and civilian pay index and comparison system, and provides representation with other government agencies on personnel policies. The three divisions within the office cover Civilian Personnel, Military Personnel, and Reserve Affairs policies.

The Office of Industrial Relations represents DOD with labor unions, government agencies and employer organizations, coordinates DOD actions connected with labor disputes, labor law compliance, labor standards and employment competition, and, finally advises on internal DOD industrial relations matters including adjustment of grievances, wage problems, and special uses of DOD personnel. A Fair Employment Policy Officer is also provided by this office.

The Office of Manpower Supply represents Defense Department before civil agencies in forming and developing national manpower policies and programs. It recommends policies and programs for procurement of manpower including such matters as voluntary enlistment, universal military training, selective service and reserve forces, working closely with OCSM on supply-of-available-manpower problems. The

Office of Manpower Supply advises JCS on military manpower resources, and collaboration in testing manpower feasibility of strategic plans. It works with the policies and programs concerning manpower supply aspects of industrial and material procurement activities in DOD, and collaborates with civil agencies in policies and programs for increasing and conserving the overall supply of critically-skilled manpower.

The new office combining Office of Manpower Requirements and Office of Manpower Utilization validates Defense Department manpower requirements and assures appropriate utilization of that manpower. In getting this job done, it must work closely with such organizations as the JCS, Bureau of the Budget and Congress. It must evaluate manpower requirements for validity, correct imbalances and resolve questionable items, and at the same time provide guidance on improvements in manning standards, tables of organization, and tables of

distribution. It must handle such matters as draft quotas, and provide policies for qualitative distribution of manpower within DOD according to physical profiles, mental groups and skills.

The Office of Armed Forces Information and Education is unique in that it has three field offices to cover the wide area of its responsibilities. Primarily, this office is responsible for policies and programs for the Office of Armed Forces Information and Education, and for maintaining liaison with civilian educators and the U.S. Office of Education. It also aids the military departments in implementing their information and education policies and programs.

Divisions in the office include a Comptroller Division, an Information Division, an Education Division, the U.S. Armed Forces Institute in Madison, Wis., the Armed Forces Press Radio and Television Service in New York, and the Armed Forces Radio and Television Service in Los Angeles, Calif.

Defense Department security policies, programs and practices, along with representation outside DOD on security matters and announcement of all security decisions pertaining to industrial personnel are the responsibilities of the Office of Security Policy. A Security Programs Division and an Industrial Personnel Security Review Division are included in the Office.

The Office of Emergency Planning perhaps has a larger job of coordination to handle than any of the other groups within the Office of the Assistant Secretary for MP&R. This office works with Defense Department Policies relating to continuity and readiness of essential DOD activities, civil defense, defense relocation, ICIS matters, defense against unconventional forms of attack, and censorship. The Office of Emergency Planning also participates with other governmental agencies on matters affecting these activities.

The best measure of the organization is the amount of work that it is able to accomplish, and on this yardstick, the Assistant Secretary of Defense for Manpower, Personnel and Reserve rates high. Although there are still serious problems in the personnel areas (the Officer Grade Limitation Act and Navy's unrealistic officer ratio are two examples), there are many that have been solved adequately. Certainly MP&R can point with pride to the work it has done with both proficiency pay and a pay raise across the board, the increasing hard core of vital skills in all of the services, improved reenlistment trends, increased manpower quality and lower disciplinary rates.

—The People—

Assistant Secretary of Defense (Manpower, Personnel & Reserve)

Hon. Charles C. Finucane

Deputy Ass't Sec'y: Stephen S. Jackson

Civilian Ass't: James C. Evans

Dir., Office of Personnel Policy: Maj. Gen. N. D. Moore

Office of Manpower Supply: Albert Kay

Dir., Office of Manpower Requirements & Utilization: Gus C. Lee

Dir., Office of Armed Forces Information & Education: Brig. Gen. S. F. Griffin

Dir., Office of Security Policy: A. T. Port

Dir., Office of Industrial Relations: Samuel Silver

Dir., Office of Emergency Planning: J. W. Clear

Chrm., Reserve Forces Policy Board: John Slezak

Chrm., Armed Forces Chaplains Board: RADM. G. A. Rosso

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SECRETARY OF
DEFENSE



Thomas Gates
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SECRETARY OF
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Secretaries, Military
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Secretary of Defense;
Secretaries, Military
Departments;
Undersecretaries,
Military Departments;
Asst. Secretary of
Defense, (ISA).



Floyd Bryant
**PROPERTIES
AND
INSTALLA-
TIONS**



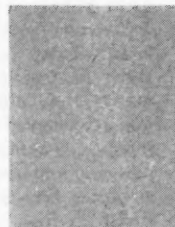
Charles Finucane
**MANPOWER,
PERSONNEL
& RESERVE**



Herbert York,
Director
**DEFENSE
RESEARCH
AND
ENGINEERING**



Murray Snyder
**PUBLIC
AFFAIRS**



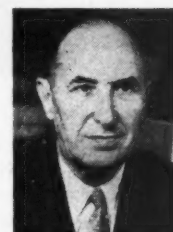
COMPTROLLER



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**HEALTH AND
MEDICAL**



Wilber Brucker
**SECRETARY OF
THE ARMY**



William B. Franke
**SECRETARY OF
THE NAVY**



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THE AIR FORCE**



Roy W. Johnson,
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ARPA



Lt. Gen. J. A. Samford
USAF, Chairman
**NATIONAL
SECURITY
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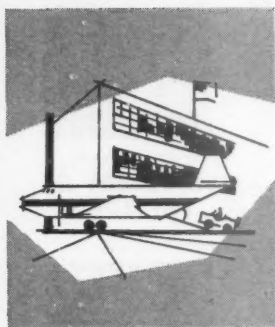
Adm. Arleigh
Burke



Gen. David
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STAFF**

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ATLANTIC COMMAND
CARIBBEAN COMMAND
CONTINENTAL AIR DEFENSE COMMAND
EASTERN ATLANTIC AND MEDITERRANEAN COMMAND
EUROPEAN COMMAND
PACIFIC COMMAND
STRATEGIC AIR COMMAND



SUPPLY AND LOGISTICS

Organizational change: the need for quick economical decisions

CHANGES in the organization of the Office of the Assistant Secretary of Defense for Supply and Logistics have been fairly frequent within the last two years. The organization has worked hard to stay abreast of the tremendous logistical challenge created by the \$40-plus billion Defense Department organization.

But it has not been change for the sake of change. Perhaps the reason for the changes are best summed up by Robert Holt, Executive Assistant to Ass't Secretary McGuire: "Organizational changes in this area have resulted from a continual evaluation of our functions and our organizational structure, to insure that we can respond to the need for intelligent quick and economical decisions. We're not static, nor can we afford to be. For all I know, next week we will be faced with a new situation that could require organizational changes. We'll have to be ready to take care of it."

It is for this reason that the Assistant Secretary's office is constantly searching for better ways to get its job done. At the present time, a study is in the works on the advantages of extending the Single Manager method of doing business to other areas of defense operations. For the same reason, this office maintains a Logistics Research staff under Nathan Brodsky, continually looking for better methods of logistics management.

Three major changes have taken place in S&L at the Directorate level within the past several months. Although none of the directorates added are altogether new, one is new to Supply and Logistics, and the other two have been raised in status.

First of the changes was tied to the formation of the office of the Director of Defense Research and Engineering. In setting up this office, Defense planners felt it would be best to get off to a clean start by "purifying" the

new R&E Director's tasks, and so those functions which did not pertain specifically to research and engineering work were purged.

As a result, the Maintenance Policy function was transferred to Supply and Logistics. Another major reason behind the change was the growing importance of the work that the Maintenance Office handled, and the fact that the dollars involved pointed to the heavy experience with funds that S&L could offer.

Also in connection with funding, S&L felt it would be best to have all related funding matters in one spot, avoiding possible duplication. One final reason had to do with the nature of the transferred office. Because Supply and Logistics draws up the logistics requirements and production policies for DOD, it was felt there would be a good chance of cutting back some of the annual \$8.5 billion maintenance bill if it were attacked at this stage of the development-production cycle.

A second directorate-level change in the structure of the Assistant Secre-

tary's office was the creation of a Telecommunications Policy Director and his staff. This office was formerly a division in the Directorate of Transportation, Communications and Petroleum Policy within S & L.

The change amounts to a promotion, emphasizing the importance of the work in telecommunications. One of many areas affected by the advent of intercontinental missiles as a means of warfare, communications have hit a new high in their priority. Also, each advance into space offers new possibilities for better communications. (The Discoverer satellite series was directed specifically at this problem area.) Because there are only a limited number of radio bands that can be used for radio communications, and because the military must have a certain number of them reserved to effectively handle their job, the coordination problems involved are extremely taxing. Also, Defense Department—S&L in particular—felt that they should be in a position to exploit any possible break throughs in this area in the best possible way, and in the shortest possible time. To insure the ability to do this, the Directorate of Telecommunications was formed.

Most recent of the three changes at this level of the S&L Office has been the forming of a Directorate for Petroleum Logistics. Again, the idea was to bring policy work in this area a bit closer to the top, in order to speed the decision process. Admits one Supply and Logistics official, "We've had a good deal of success with flaps in this area. We came through a sort of trial by fire in the Jordan-Lebanon situation, and we came through it very well."

The three new Directorates bring the total in S&L to nine, carefully picked to cover each and all of the more important areas in which the Assistant Secretary for Supply and

—The People—

Assistant Defense Secretary, Supply & Logistics: Hon. Perkins McGuire
Deputy Ass't Sec'y: Philip Le Boutellier
Director for Small Business Policy: Andrew W. Duncan
Director for Procurement Policy: G. C. Bannerman
Director for Production Policy: R. A. Crist
Director for Planning and Requirements Policy: Glenn V. Gibson
Director for Supply Management Policy: Paul H. Riley
Director for Transportation Policy: Gayton Germane
Director for Telecommunications Policy: William Hatton
Director of Maintenance Policy: John R. Taylor
Director for Petroleum Logistics Policy: VAdm. B. B. Biggs (USN, ret.)

Logistics must work. The other six are Small Business, Procurement, Production, Supply Management, Transportation, and Planning and Requirements. Within the Directorates, S&L maintains staffs which specialize in specific segments of the more general area under the Director's responsibility.

The Director of Procurement Policy provides guidance for developing policies, programs, systems and procedures in the field of procurement for the entire Defense Department, and then insures effective implementation of these policies and procedures in the three military departments. He is also responsible for the work of the two divisions under him. The first of these is the Armed Services Procurement Regulation Division.

In this division lies responsibility for operation of the ASPR committee, a tri-service group that draws up the huge ASPR book which governs military procurement. S&L's ASPR Division is also in charge of coordinating efforts of the services on procurement matters considered by the Committee.

Second of the two divisions is the Procurement Specialist division, a group of experienced procurement analysts charged with constant review of the existing procurement policies and procedures. Each specialist works within the scope of his specialty, recommending improvements as needed, and serving as a focal point in a continuing drive for better procurement practices. These specialists are also a point of contact for Congress and industry when problems arise in either quarter.

Production breakdown

Next, S&L maintains a Directorate of Production, responsible for guidance on policies, procedures and systems relating to industrial mobilization planning, production scheduling, priorities and allocations, production equipment, industrial defense measures, commercial priorities, and industrial activities, inspection and quality control.

The two divisions under the Office of Production Policy are Production and Schedules Division, and the Inspection and Quality Control division. In the Production and Schedules Division, there are five branches: (1) Industrial Planning, (2) Production Activities, (3) Priorities, (4) Production Equipment, and (5) Industrial Facilities Protection. Using these branches, the Directorate develops, reviews, and recommends policies, plans programs and procedures for reporting, reviewing and approving in the areas of its cognizance.

The Staff Director for Inspection and Quality Control insures that sup-

plies and equipment procured, stored, and maintained throughout Defense Department conform to quality and reliability requirements, and he initiates development of uniform inspection, testing and quality control practices among the services. He also evaluates the work of the military departments in this area, and coordinates research activities in applied quality control and reliability conformance.

The Planning policy

The Office of Planning and Requirements Policy, with its four Staffs and divisions, develops logistic requirements for end items, secondary items, materials, components, supporting facilities and services. It also evaluates requirements from the military departments, and monitors vulnerability studies assessing potential impact of attack on U.S. resources.

The Staff Director for Planning in this office works with national and Defense Department policies, developing guidance for those who plan requirements for all aspects of logistic support. Besides this, the office advises all other offices in Supply and Logistics on interpreting and applying these plans. Included in the staff are branches covering Policy and Guidance, and Logistic Readiness Evaluation.

Under the Staff Director for Program Analysis there are branches covering Aircraft and Support, Equipment, Materials, and Advanced Weapons. They exist to aid the Staff Director in analyzing requirements plans submitted to cover selected items, components, materials and services, appraising logistics implications of programs, and developing and recommending plans and systems to improve requirements computation methods.

With the exception of the Branch working with Advanced Weapons, the branches in this directorate need little explanation. The Advanced Weapons Branch analyzes advanced weapons systems and special programs to identify and anticipate their logistics implications. It must also initiate timely action to resolve or prevent logistics problems arising in these programs, and to assist in facilitating rapid operational status. As would be expected, this branch serves as point of contact between Supply and Logistics and Advanced Research Projects Agency, Director of Defense Research and Engineering, and the Special Assistant to the Secretary of Defense for Atomic Energy.

The Staff Director for Logistics Research Analysis works in those areas of logistics management which are not specifically assigned to any one S&L

Office. His staff works on a project basis, and is supported, on an as-needed basis by other offices in both Supply and Logistics and the military departments.

As examples of the sort of project that this office deals with, there are the recurring problems of Legislative Liaison, and general Research and Logistics Systems Analyses.

The remaining staff director in this office works with Vulnerability Analysis, assessing the effects of a possible attack on the U.S. in terms of military supply and logistic capability and supporting industrial resources. It is also the logical point of contact within Supply & Logistics for the Office of Civil Defense and Mobilization.

Next of the divisions within Supply and Logistics is the Office of Supply Management Policy, under Paul Riley. The office has the same policy guidance functions as its counterparts, but is perhaps more important through its managerial relationship to the various Single Manager organizations, and the Armed Forces Supply Support Center. The Supply Management Office is composed of four divisions—Storage and Warehousing Material Management, Utilization of Catalog and Standardization, and the Commodity Single Manager Division.

Storing the Assets

The Storage and Warehousing Division develops policies, systems and programs for the efficient and economical operation of the military supply system with regard to the storage and warehousing activities of the military departments in (1) the management, operation and utilization of storage and warehouse facilities at depots, terminals and other installations under Department of Defense control; (2) the utilization of commercial storage and warehouse facilities; (3) the utilization and management of materials handling activities at depots, terminals and other installations under DOD control.

Divided into two branches on Inventory Management and Surplus Disposal, the Material Management Division develops policies, criteria, programs and systems to effect current improvements and desirable uniformity in inventory management systems of the military departments to assure development of a comprehensive program to meet the present and future supply system needs of DOD, and to improve the DOD management program for the merchandising and disposal of surplus personal property.

The Utilization of Catalog and

The breakdown in detail

Standardization Division maintains cognizance of the Federal Catalog and Defense Standardization Programs, and assures the integration of the results of these programs into the supply management systems of the Department of Defense. Perhaps most important, this office monitors all of the Defense Department's single manager programs except in petroleum. For all of the other single manager areas, it develops and/or coordinates OSD policy and program guidance required for the effective functioning of these managers.

Regarding the Armed Forces Supply Support Center, this office coordinates a continuous evaluation of the overall effectiveness of Single Manager operations and recommends projects for study by the AFSSC on potential areas of extension in such operations.

One of the smallest offices in the office of the Assistant Secretary of Defense for Supply and Logistics is the Office of Small Business Policy. The basic job is to "advise and assist the Assistant Secretary on all matters of Department of Defense procurement concerning or affecting small business." A small measure of the scope of the job at hand is the offices that this one must keep close touch with: Small Business Administration and the Executive Office of the President are two of the more important ones. Perhaps more vital—if not as spectacular—is the job of assisting businesses seeking to participate in military procurement. The office also reviews procurement practices and conducts independent studies of problems in the military procurement policy field as they affect small business firms or distressed labor areas and submits recommendations for resolution of these problems.

The Wrap-up

Office of Maintenance Policy, one of the new groups in S&L, works with three divisions: Systems Analysis, Policy and Programs, and Industrial Engineering. The aim is to see that maintenance of weapons, equipment and supplies in the Military Departments is effectively and economically planned and implemented.

The Staff Director for Policy and Programs is responsible for review and evaluation of departmental policies and programs in the area of maintenance, and for conformance with implementation of approved plans and policies of JCS and OSD. He also provides for the general assessment of shortcomings which affect or can potentially affect

the capability of maintenance to support planned readiness and operational objectives.

Handling another part of the \$8.5-billion maintenance job will be the Staff Director of the Systems Analysis Division, charged with across-the-Services technical evaluation of policies, concepts, systems and criteria which generate or establish requirements for overhaul or maintenance performance at specific intervals of time or periods of usage, and provides for the early review and assessment of maintenance planning for the introduction of new weapons and equipment.

Industrial Engineering

Finally, the Industrial Engineering Division is responsible for review and evaluation of the DOD industrial plant complex, for assessment of effectiveness of operations, for efficiency and economy of resource utilization and for developing and recommending with the military departments, appropriate steps to provide in DOD more effective, efficient and economical administration and operation of industrial activities.

Also new is the Office of Telecommunications Policy, with its two Divisions—Policy Guidance and Coordination; and Systems Planning and Review. Under the leadership of William Hatton, the job is to maintain responsibility for development and coordination of policies, programs and systems for the integration of current, long-range, and mobilization telecommunication activities that are needed to provide DOD direction and guidance in the management and usage of military and relevant commercial services and systems.

Multiplying the inherent complexity of the job of the Director of Telecommunications policy are the many related functions assigned to him. Among them are (1) to provide advice and aid to the Secretary of Defense, Assistant Secretary of Defense (S&L), other Assistant Secretaries, and the Office of the Secretary of Defense and Military Department Staffs on the various aspects and considerations affecting telecommunication policies, plans and programs; (2) to develop and recommend to ASD (S&L) steps—including transfer, reassignment, abolition, consolidation and establishment of functions—which will provide for more effective, efficient and economic administration and operations in the telecommunications field, and will

eliminate unnecessary duplication or will contribute to improved military preparedness.

Also, the director must (3) develop policies, programs, systems, procedures and standards covering DOD telecommunications planning and program development, (4) provide the coordination and control point within DOD for telecommunications plans and programs to assure conformance with established DOD policies for telecommunications, (5) represent DOD with other governmental, non-governmental and international organizations on telecommunications matters of mutual interest or responsibility, and (6) evaluate the implementation, administration and management of approved telecommunications policies and programs throughout Department of Defense.

In two related functions, the Director is responsible for (1) participating in the review of budget estimates, apportionment requests, and construction authorization programs which have a bearing on telecommunications activities, and, (2) evaluating plans, programs, and systems which bear on telecommunication activities and recommend DOD positions as appropriate.

The Staff Director for Policy Guidance and Coordination is responsible for the development of management techniques leading to more effective utilization and integration of telecommunications facilities and services; initiation of appropriate policy directives and instructions and for providing guidance for peace-time and mobilization tele-communications planning; reviewing and assessing conformance by the Military Departments in their implementation of approved DOD policies; providing guidance for telecommunication mobilization plans prepared by other agencies making recommendations on the adequacy of such plans in relation to DOD requirements; serving as the focal point for coordination and establishment of the DOD position on telecommunications matters relating to allocation of radio frequencies, the establishment of Armed Forces radio and television stations, and developing guidance for the communication industry and appraises plans under various mobilization conditions; and preparing reports and analyses consistent with the assigned responsibilities and functions as directed.

Charged with development and long range coordination of current and long range planning for telecommunications is the Systems Planning and Review Division. This office also works to implement and manage current and long range policies and programs which will lead to maximum integration, uniform-

ity and compatibility of telecommunications in the Military Departments with the objective of developing common DOD telecommunications systems, and reviews and evaluates current and long range program requirements of the Military Departments and relevant commercial communications activities to insure maximum economy efficiency, uniformity and compatibility.

Number eight on the list of Directorates within ASD for Supply and Logistics is Office of Transportation Policy. This office contains three divisions, set up according to the functional lines of transportation itself: Air and Surface Transportation and Transportation Plans and Special Projects.

Working with "all aspects of air transportation and aviation, both military and commercial," the Air Transportation Division handles all matters within and outside of DOD in this

area. Of principal concern is the adequacy of the national and military airlift capability. It has been the focal point within the DOD for preparation of the report requested by the President on the military role of MATS. The Surface Transportation division is the counterpart of Air, with all of the resultant responsibilities. Both of these divisions are in a managerial relationship with Single Managers in their respective areas.

Special Projects

The Transportation Plans and Special Projects Division works with all aspects of transportation planning and special projects assigned by the Director, and with all management plans and programs for DOD administrative vehicles.

Last of the Offices within the office of the Assistant Secretary for Supply and Logistics is that of Petroleum Logistics Policy. It is the only office

in ASD/S&L that deals exclusively with an end item. This office is responsible for procurement, production, distribution, transportation, storage, requirements, cataloging, standardization, disposal, and readiness planning as they relate to petroleum products and facilities within the Department of Defense. The two divisions cover Requirements and Feasibility, and Plans and Programs.

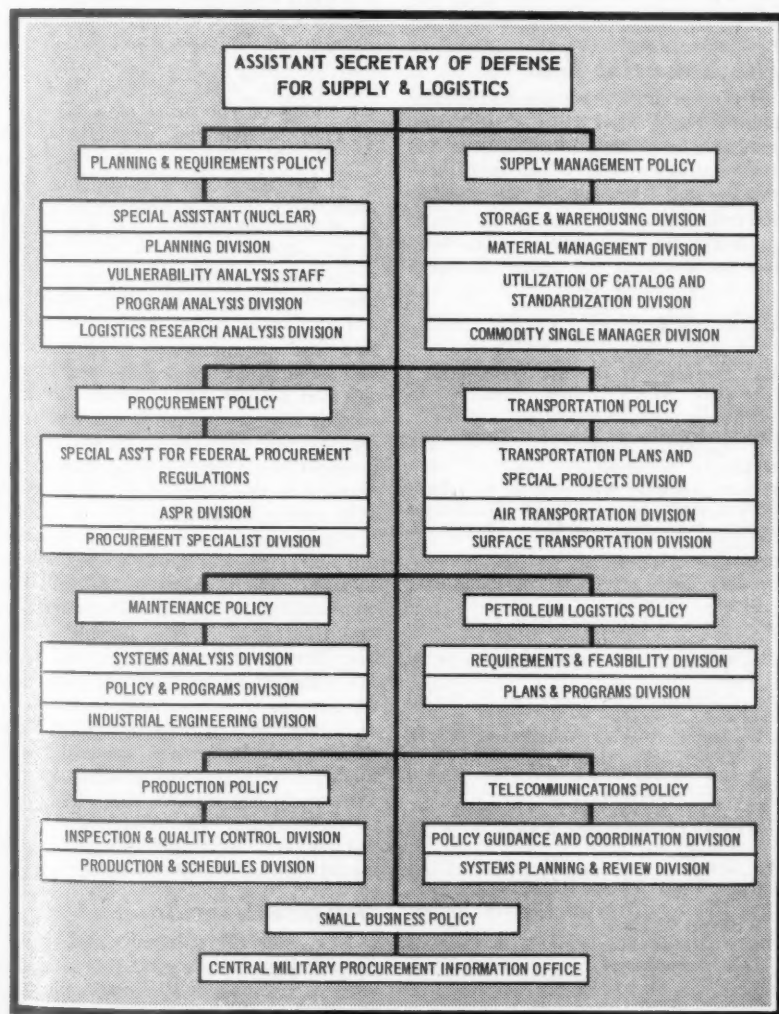
First of the divisions is responsible for maintaining continued liaison with other government agencies and industry advisory groups to determine the feasibility of military petroleum program requirements; for making recommendations on mobilization reserve facilities needed to meet critical petroleum product needs, and for maintaining appropriate reserve levels of those products; and for developing guidance on the wartime availability of petroleum products of the military.

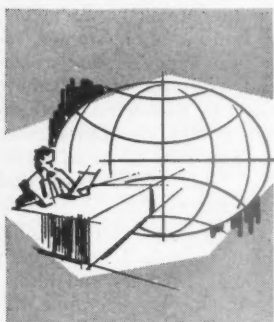
The Staff Director for Plans and Programs is responsible for the general assessment of shortcomings which affects or can potentially affect the capability of providing petroleum support for planned readiness and operational objectives; for guidance in collaboration with other components of the S&L Office to effect efficient procurement, production, distribution, transportation, storage and disposal or petroleum products and facilities; for participating in industrial security programs; for developing policy and guidance for the hardening of petroleum product facilities in conformance with the DOD hardening program; and for developing and recommending the defense position on requests for Certificates of Necessity, essentially of petroleum facilities and policies on matters such as oil imports, tax amortization, small business considerations, petroleum procurement policies.

The vitality and essentiality of the job that is the responsibility of the Assistant Secretary of Defense for Supply and Logistics precludes anything but a dynamic and active organization. Because the responsibilities that are a part of the total job—in terms of dollars involved—are larger than those resting in any other Defense Department office except for that of the Secretary himself, there is no elbow-room for let's-wait-and-see procedures.

Because of these factors, Supply and Logistics is forced into following its own precedent in organizational planning—moving quickly but carefully to the particular system of management that will serve best, both to meet the immediate crisis, and to endure in the face of growing and continuing situations of challenging management problems that must be met and solved.

How S&L is Set up





INTERNATIONAL SECURITY AFFAIRS

Handling the many facets of world military responsibility

MENTION the Draper Report to just about anyone in the Office of the Assistant Secretary of Defense for International Security Affairs, and you will get just about the same reaction you could expect from mentioning the Franke Report to a Navy man: a curious mixture of "Thank God," and "There'll be some changes made."

In both reports, the implication was something like "Let's stop living in the dark ages." But if it was a slightly outdated organization that the Navy had to contend with, ISA was faced with a set of prejudices and reluctances that dated back to sometime before the signing of the Constitution. The best summing up is in the report itself:

"The issue is whether we intend to seek survival in isolation—a state of seige—as the world continues to shrink . . . This is not a new issue. It is an old one, but the new feature is that time to settle it is running out . . . The only alternative we can see to the interdependent allied free world, strengthened by our aid where needed, would be the Fortress America concept—taking our first stand in the last ditch."

How much good the Draper report will do in the way of spurring Congress and the nation to action remains to be seen, but the pleasant smile that crosses the face of the ISA man when Draper is mentioned is a strong indication of what the Military Assistance experts feel about the report.

In an age when the intercontinental missile is generally considered to be the "ultimate weapon," it has been too easy for the public—and many military men—to overlook a basic factor in the cold war: in an era of nuclear stalemate, he who can nibble best will make the most ground. It is for this reason that the U.S. must have strong allies, and the resulting strong perimeter of defense. The U.S. must have allies who are capable of defending themselves. The alternatives are to "take the first

stand in the last ditch," or to create our own overseas defense perimeter, using U.S. troops.

The last of these alternatives is as impossible as the second. The cost of providing U.S. troops to handle the mission that is now handled through military assistance would be prohibitive in itself, to say nothing of the manpower that would be needed.

The Essential Tool

To quote the Draper committee once again: "The United States should commit itself to go ahead with a constructive program in this whole field, both military and economic, or alternatively determine that we should no longer undertake the program . . . To abandon the program, for errors in execu-

tion or for any other reasons, would be to abandon the free world and to lose the cold war . . . The Mutual Security Program is now and will remain an essential tool of foreign policy."

In addition to recommending more money for the Mutual Security Program, the Draper committee (sponsored by the President and administered by Institute of Defense Analyses) stated that one of the major problems was the way in which it was treated—something on the order of a stepchild of DOD. Their flat recommendation was that the Military Assistance Program be treated as a continuing program, with planning, programming and funding to extend over as long a period as feasible.

Formerly authorized and consequently programmed and funded on a year-to-year basis, it is most likely that ISA planning and programming will be stepped up to three years with the next budget, and possibly (as ISA would like it) even longer in the future. But this is a Congressional prerogative. There are several areas covered in the report that will be curable within DOD itself.

First—and in spite of whatever Congress says on the funding question—ISA has definite plans in the mill for overhauling the Office of Programming and Control under the Deputy Assistant Secretary for Military Assistance Programs. The most likely direction for the change to take would be creation of a new and specifically designated division for long-range programming. Such an addition would result in no increase in the staff of the office, and if the Draper report provides the criteria for judging, the dividends would pay off the investment.

Decentralization

Next, thought is being given to decentralizing various MAP functions, such as planning and programming to the JCS Unified Commands, with an

The People

Ass't Secretary of Defense (International Security Affairs): Hon. John N. Irwin, III

Special Ass'ts:

L. Addison Lanier

Timothy W. Stanley

Military Advisor: Maj. Gen. J. A. Dabney

Deputy Ass't Sec'y: Robert H. Knight

Deputy Ass't Sec'y (MAP): Charles H. Shuff

Special Ass't: W. M. Leffingwell

Deputy Ass't Sec'y (NSC/Planning):

Haydn Williams

Dir., Office of Planning: Brig. Gen. J. H. Polk

Dir., Office of NSC Affairs: Robert H. B. Wade

Dir., Office of OCB Affairs: W. S. McCall

Regional Directors:

European Region: Brig. Gen. F. H. Miller

Near East, South Asia & Africa: RAdm. E. B. Grantham

Far East: RAdm. E. J. O'Donnell

Western Hemisphere: Brig. Gen. F. O. Hartel

Dir., Office of Foreign Economic Affairs:

Capt. W. B. Thorp (USN, ret.)

Dir., Office of Foreign Military Rights:

William E. Lang

Dir., Office of Programming & Control:

J. I. Holcombe

Dir., Office of Comptroller:

Markley Shaw

eye for more direct contact between MAP forces and those of the U.S.

But in spite of these changes, the basic organization of ASD/ISA will remain essentially the same. With the exception of a few relatively minor changes within the past year or so, the organization at ISA is readily recognizable from two years ago.

The minor changes amount to having the various Regional Directors under the Deputy ASD for Politico/Military Affairs assigned by areas (European, Near East, Far East, Western Hemisphere) instead of by political/military considerations as before. These offices will now include responsibility for the various political groups, such as NATO, SEATO, CENTO. Secondly, the office for United Nations Affairs has been pulled away from the Military Advisor to the Assistant Secretary, and reassigned—with the same functions—to the Office of Plans. However, ISA planners feel there may be a chance that the former arrangement will be reinstated, to allow for current interest in disarmament talks.

Also, the former Office of Special International Affairs no longer appears on the ISA organization chart, its functions having been split up among the other ISA offices.

As the organization now stands, it is divided into three major sections, each under a Deputy Assistant Secretary. The three Deputies are responsible for (1) National Security Council Affairs and Planning, (2) Military Assistance Programs, and (3) Politico/Military Affairs.

The first of these major sections contains three offices, covering Plans, National Security Council Affairs, and Operations Coordinating Board Affairs. The job is to recommend the direction in which DOD should go regarding ISA affairs, and then to let NSC know about it. More specifically, the office studies and draws up long-range plans for Defense Department in the fields of NSC Affairs and international security, while at the same time helping to plan the long-range military assistance requirements in conjunction with the regional organizations, the military departments, overseas commands and the other ISA offices.

Military Assistance

The office must also evaluate long-range politico/military aspects of advanced weapons systems, and advise ASD/ISA on emerging basic problems in world situations and possible DOD action to meet these problems.

Under the Deputy Assistant Secretary for MAP falls the responsibility for Programming, Control and Finan-

cial Management of MAP projects within DOD. The office directs Military Departments work in carrying out Military Assistance Programs, and sets up control, programming and scheduling for their implementation. This office monitors not only the U.S. contribution to these programs through Unified Commands and MAAGs, but develops and supervises procedures for local contributions to effective support, and coordinates of effort for efficient organization and operation of U.S. MAP agencies as well.

In the Comptroller half of the DASD/MAP office, DOD budget programs for Military Assistance Programs and related projects are developed, reviewed, coordinated and administered. The office also handles accounting policy, fiscal procedures, fund controls and consolidated reporting in this area. To insure full coverage of this area, the office maintains a Budget Division and a Fiscal Operations Division.

One of the most important jobs that is handled by the Assistant Defense Secretary for ISA is that of advising the Secretary of Defense with respect to politico-military-economic affairs. It is significant that the present Assistant Secretary for ISA was formerly DASD for Politico/Military Affairs—the broad view that must necessarily be taken by this office would seem to make it a logical stepping-stone to the top ISA job.

Working closely with the Department of State, this office serves as a sort of State Department within the Department of Defense, covering the various geographical areas as well as Foreign Economic Affairs and Foreign Military Rights.

In the Office of Foreign Military Rights, the job is to set DOD policies and positions on military facilities, status of forces, operating rights and agreements for exchange of atomic information. The policies and programs concerning DOD interest in foreign economic affairs of the U.S. Government, positions on economic and technical interests on treaties of peace and international conferences, and guidance and support of foreign missions in economic and related responsibilities fall under the responsibility of the Office of Foreign Economic Affairs.

The four regional directors within ISA (European, Far Eastern, Near Eastern and Western Hemisphere) are also part of the office of the DASD for Politico/Military Affairs. The responsibilities of these offices fall into six categories: (1) forming policies and positions on Defense Department aspects of international security affairs pertaining to their respective countries or re-

gional areas; (2) acting as country and regional advisors for their respective areas to the Assistant Secretary for Defense (ISA); (3) participating in the initiation and development of country aid programs;

Also, (4) evaluating effectiveness of Military Assistance Programs and recommending modifications as needed; (5) acting as primary liaison with State and other Government agencies to insure coordination of politico and economic affairs with military affairs pertaining to their respective countries or regional area; and, (6) advising and assisting in the preparation and coordination of DOD positions on international security affairs pertaining to international organizations.

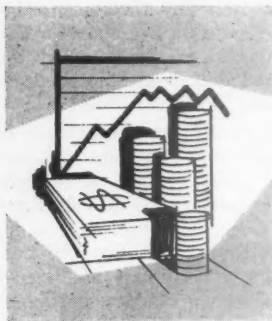
How Much Success?

Besides the three Deputy Assistant Secretaries under him, the Assistant Defense Secretary for ISA maintains a Military Advisor who keeps him posted on the military aspects of international security affairs, military assistance programs, regional organizations and base rights. The Military Advisor also coordinates ISA work with respect to the DOD position on disarmament, and serves as a contact coordinator with JCS and the military services. He also works with the DOD positions on ISA pertaining to the Permanent Joint Board on Defense (Canada/U.S.).

It is a fair comment on the success and thoroughness of the staff work turned out by these offices that Assistant Secretary Irwin accompanied Secretary of State Herter to Geneva, and later, President Eisenhower on his recent European trip.

It is a further measure of the complexity of the work handled by the Assistant Secretary for International Security Affairs that he must monitor the new and necessary Military Assistance Institute, formed just last year to train officers for their work in a specific military assistance area. In this school, ISA is able to train some 50% of the officers who will be assigned to MAAGs in a given time period, runs roughly a dozen 100-man classes each year.

As a final comment, it is only necessary to realize that ISA must administer a world wide program, covering well over a dozen countries, and forming what is perhaps the most important line of free world defense against limited war. Besides this, ISA must work continually, on a day-to-day basis with the many conferences, meetings, visits and planning and policies that are all a part of the business of keeping the free world strong and unified in today's cold war situation.



THE COMPTROLLER

At presstime, a thorough-going reorganization

AS THIS Directory Issue goes to press, the Office of the Assistant Secretary of Defense (Comptroller) is putting the final touches on the first thorough-going reorganization that office has had in several years.

What the reorganization will do: create a simplified, streamlined chain of command, to strengthen the budgeting and financial management programs of the Defense Department and permit the organization to function with enhanced speed and efficiency.

Under the recently completed organizational shifts, the new Comptroller and his Deputy will be able to operate under a reduced span of command, and the organization itself will be in more logical arrangement, allowing greater emphasis in areas where it is needed, and providing more resources for more active pursuit of improved financial management.

What the changes have done is to set up a total of three Deputy Comptrollers reporting directly to the Comptroller, and including all of the former entities under the Comptroller, besides setting up a new function.

The one new Deputy Comptroller that is being created is the Deputy Comptroller for Financial and Operating Management. In addition to being something of a catch-all for miscellaneous functions and offices not related to the other Deputy Comptrollers, the new office will contain a management examination group.

The key contributions from the new division will be to provide the whole Defense organization with a staff service to review departmental operations in the field on a continuing basis and thus keep abreast of day-by-day field organization problems.

The increased staff attention to field review will serve to strengthen knowledge of the Comptroller organization of field operations. On a more limited scale, the idea has been used by the Comptroller's shop in the past, and it

has been regarded as an aid by the field commanders, rather than an annoyance.

Included in the new Deputy Comptroller's shop will be four offices that formerly reported directly to Comptroller McNeil—the Contract Finance Division, the Data Systems Review Division, the International Division, and the Statistical Services Division.

The major jobs of the Data Systems Review Division is to conduct research and prepare studies on automatic data processing system techniques, equipment and applications. The staff also promotes a more standardized approach to this kind of work in DOD, and reviews and recommends action on proposals for buying or renting electronic data processing equipment. Finally, the staff is responsible for review and evaluation of ADP systems actually in operation as well as those proposed for test to insure that they will provide actual economies and meet management needs effectively.

The new office for Financial and Operating Management will also include the Statistical Services Center (formerly Progress Reports and Statistics Division). Charged with providing statistical data and analyses, and a central point for coordination of statistical reporting requirements and forms, the office maintains three branches, covering Materials and Facilities, Manpower, and Report Forms and Standards.

The office of the Deputy Comptroller

for F&OM also has review and evaluation responsibility within OSD for General Accounting Office reports. In this connection, it will coordinate all replies from DOD to insure consistency.

The International Branch analyzes international economic and financial developments to appraise their effect on the international military programs and related fiscal planning by Defense Department. Also, the branch must evaluate economic capabilities of foreign nations and assess the impact of U.S. economic assistance on the other countries. It also analyzes approved force requirements of military programs and relative allocations among various nations participating, and develops long-term approximations of costs of international military programs and U.S. military assistance from economic and budgetary standpoints.

Under the Deputy Comptroller for Accounting, Finance and Audit Policy, the two divisions, logically, are an Audit Division, and an Accounting and Finance Policy Division, containing four branches. In the Audit Division, the work is concerned with developing and establishing audit policies and plans for both internal and contract auditing. The office analyzes and coordinates audit organizations, programs, and reports in the three services, and works with ASD for Supply and Logistics in developing procurement regulations which have audit or contract costing implications.

In the Accounting and Finance Policy Division, the job is to develop and set up a coordinated financial system to serve budget needs including budgeting, financial control and reporting. This division is responsible for uniform terminology and account classifications and liaison with other agencies on such matters.

The four branches of the division are designed to blanket the areas in which the above policies would be needed. They cover Appropriation Accounting,

—The People—

Ass't Secretary of Defense: (Comptroller)
Deputy Comptroller (Budget): Harold R. Logan
Deputy Comptroller (Accounting, Finance and Audit Policy): H. W. Bordner
Deputy Comptroller (Financial & Operating Management): W. Carl Blaisdell
Dir., Statistical Services Center: Foster Adams
Dir., Data Systems Research Staff: C. A. Phillips

Property Accounting, Industrial and Cost Accounting, and finally, Finance. Between the four, such differing areas are covered as foreign currency matters, administrative control of funds, stock fund operations, travel and transportation, cost accounting for industrial and commercial type establishments, and integration of cost accounting and property accounting with appropriation accounting into one system.

Third of the Deputy Comptrollers is the Deputy Comptroller for the Budget. This office, which was formerly the Deputy Comptroller for Budget and Economics, has been streamlined under the reorganization, with the Director of Economics now reporting directly to the Comptroller. The office now includes the Fiscal Analysis Branch which has been transferred from the former Economics and Fiscal Analysis Division.

The six other branches in the office cover areas including Personnel, Procurement and Production, General Administration, Military Construction, Operations and Maintenance, and Research and Development. As can be seen from the titles of the branches, one of the major activities in the Budget Division is maintaining contact with the other areas of DOD, to create a complete and reasonable budget each year.

The budget review process, as it is handled by each of the above branches, is to develop and coordinate the guidelines for the preparation of budget estimates and supporting data for the various DOD agencies. Also, these offices must supervise and coordinate the preparation of such budget estimates for submission to Bureau of the Budget, and in this connection monitor, review and integrate the budget recommendations of the Assistant Secretaries of Defense. The six budget branches analyze budget submissions—including requirements and other supporting data—for consistency, adequacy, feasibility, costs, and conformance to DOD programs and policy.

They are point of contact for BOB in Defense Department, and arrange for and participate in justification of budget estimates before BOB. They also prepare detailed justification data for presentation by the Comptroller before Congressional Committees.

Upon analyzing requests in DOD for apportionments, these offices recommend appropriate action to higher authority. Progress reports on execution of departmental budget programs are analyzed, and pertinent field inspections related to financial management are conducted. Cost estimates on legislative proposals are handled by these offices, and budget methods are developed

The Fiscal Analysis Branch works with analyzing fiscal data to ascertain financial progress in terms of obligation and expenditure rates in DOD appropriations and reports on significant trends and conditions in these areas. The Fiscal Analysis Branch also prepares and continuously reviews the estimates on obligations, expenditures and estimates of annual carry-over for all funds appropriated to the DOD. Finally, the office must prepare fiscal reports, develop special financial statements, charts and graphs as needed in support of budget presentations, studies and economic analyses.

Besides the three Deputy Comptrollers, there are two Special Assistants and one Director reporting directly to the Comptroller of the Defense Department. The first of the Special Assistants is concerned with liaison with Congressional Appropriations Committees, including coordination of the presentation of DOD budget requests to assure proper perspective. The second Special Assistant serves two functions. First, he conducts special studies, investigations and reports for the Comptroller, and, second, he provides advice and assistant on Comptroller matters.

It is easy to understand why any conscientious Comptroller in the Defense Department would want his Economics Director reporting directly to him. The job of the Economics Director is to let the Comptroller know how the other half of the Federal Budget is spent, what effect DOD money is going to have on the national economy, and generally what the status of the economy is, as it pertains to DOD—and how the economy will affect DOD money programs. The Economics Division also prepares DOD budget statements and supporting data for presentation to the Executive Branch and Congress.

How Economics Works

The first of Economics' branches analyze overall defense plans and operations, and studies the various component military programs and the effect of current and prospective related changes, in order to gauge the impact on the national economy and to determine the economic considerations and the problems involved. It also analyzes current economic conditions to evaluate and interpret the significance of economic fluctuations and special developments and their effect on military programs and planning. Finally, the office reviews proposed National Security Council policy papers and prepares the Defense portion of Financial Appendices.

Besides the perennial and increasingly difficult budget problems that

face the Office of the Comptroller each year, the people in this Assistant Secretary's office are at the present time—and continually—working on better ways of getting a more accurate and efficient budgeting and financial systems.

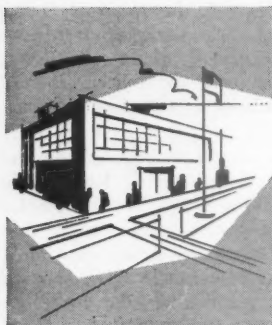
Presently, the top programs on the management improvement list include one which would set up a financial management system similar to the one now practiced in the Army—but on a simpler, more refined Defense-wide basis. This is definitely in the long-range category (3-4 years), but those who are working on it in the Comptroller's shop—and from all reports, those in the services—are willing to work to get it. Points out Deputy Comptroller Bordner, "We are working more intensively in this one line, because we've never had a full blown system of this type. It will carry with it many technical improvements through cost-based budgeting and accrual accounting, and it will integrate our accounts for budgeting and accounting."

Adds Budget Director Logan, "When we get this set up, it will make everybody look at the whole budget picture, instead of working in a vacuum." The system that the Comptroller's shop has in mind is similar to the budgeting system Army now uses on its Operations and Maintenance funds.

When the recurring \$40-plus-billion budget headache is considered as a year-round problem in the Comptroller's shop, it is a fine tribute to the maintaining of management standards that this office should be able to work as hard as it has on improving the financial methods of the Defense Department.

And no finer compliment than this—and the following comment by Deputy Comptroller Bordner could be paid to the job done by out-going Comptroller McNeil: "Although he is leaving after over a decade in DOD, we have no worries about transition to a new Comptroller. Mr. McNeil is leaving a strong enough organization so that there will be continuity."

Generally speaking, the changes which have taken place in the Comptroller's organization will not drastically change the basic philosophies that have governed in the past. They are evolutionary rather than revolutionary, and aim at a tighter, more clearly focussed organization, and one which will be better able to handle the \$40-plus-billion budget that Defense Department must develop, justify, and monitor each year. And it is also true that the changes that have been made will pave the way for more emphasis on management improvement throughout the Defense Department.



PROPERTIES AND INSTALLATIONS

*Close coordination with DOD
And the construction boost*

MOST significant change in the Office of the Assistant Secretary of Defense for Properties and Installations during the past year or so has not been in the organization itself, but rather in the tempo at which the work is being done, and in the relationship of the office to other areas of Department of Defense.

What this amounts to is that Properties and Installations is being brought into a closer relationship with the rest of DOD. This is not to say that the office has been previously operating in a vacuum. Rather a formerly close working arrangement is being made even closer.

Key factor is that next year's military construction budget will be included in the total Defense Department budget request, instead of being treated separately as it had been in the past. The idea, according to one top P&I official, is to get "everything into one package," so that Congress will be able to look at the total defense picture, instead of parts of it at a time.

Next, as they have gained experience, the military departments have been able to take more and more of the workload off the shoulders of the P&I people. This will mean that military construction work will have a more thorough and qualified look in every area.

Because everything that P&I works with is of a more or less permanent nature, perhaps the biggest problem that is faced is what will be needed in the way of installations, as technology seems to leap ahead from day to day.

To meet this challenge, P&I reviews existing installations within DOD before acquiring land or new installations. Conversion, transfers between services and joint use are also carefully considered.

In another vital area, P&I is able to report a great measure of success. Assistant Secretary Floyd Bryant was able to report to Congress this year that the back of the housing prob-

lem will be broken with completion of Capehart units planned throughout the country. In the overseas areas, Surplus Commodity housing has done much to alleviate the quarters situation for servicemen and their families.

In the real property area, Properties and Installations is able to report that the trend of Defense Department-owned land has been downward. With the exception of land needed for missile sites, runway extensions and other unique requirements, disposal of property has been the rule rather than the exception. This is one of the most important jobs handled by the office, because it serves both to bolster the local tax rolls and to cut back on the staggering Operations and Maintenance bill the services contend with each year.

The areas covered by the Assistant Defense Secretary for P&I include military public works, real estate and real property, family housing, reserve forces facilities, general purpose space and industrial and commercial facilities, including fixed industrial equipment. The office is divided into two Directorates, to cover Construction, and Real Property Management.

The Directorate of Construction maintains a Projects Division, a Technical Division, and a Reserve Forces Facilities Division. The overall job is to provide policies, plans and programs pertaining to military public works construction, long-range and mobilization construction program planning for the military departments, maintenance and protection of real property and related serv-

ices, and operation of utilities plants and systems.

The office works closely with the Defense Comptroller to determine financial plans in support of military construction programming, to support military construction appropriations before Bureau of Budget and Congressional committees, and to post appropriate determinations with respect to apportionment of funds. Finally, the Director of Construction must guide policies pertaining to mobilization use of architect/engineer construction contractors, laborers, materials and equipment with OASD S&L and OASD MP&R.

The Projects Division works with current, long-range and mobilization programs for military construction. It reviews and integrates military public works programs for DOD, and reports on status and condition of current and planned construction programs. The division is the point of contact for the Comptroller to determine financial plans in support of military construction, to evaluate appropriations proposals from military departments for construction and support of these programs before Congress.

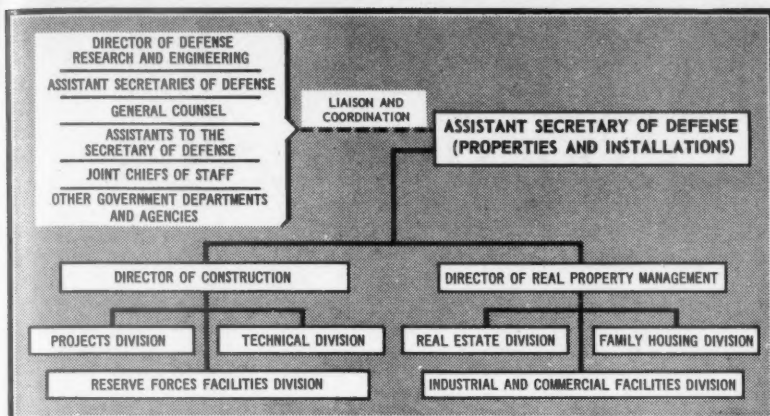
The division also conducts periodic studies to assure conformity to Defense Department construction policies, plans and programs, while providing DOD representation on construction matters with Congressional committee staffs, other government agencies, industry and professional construction groups and associations.

The Technical Division sets policies, standards and criteria governing engineering, construction, facility maintenance practices, space arrangements and allowances, budget pricing, and type, size and number of facilities. The office maintains cognizance of these areas on a continuing basis, from initial engineering work to post-program surveillance of the areas involved.

It also sets policies, procedures and criteria for engineering design and maintenance uniformity; resolves en-

The People

Ass't Secretary of Defense (Properties & Installations): Hon. Floyd S. Bryant
Deputy Ass't Secretary: Cooper Benedict
Director of Construction: E. J. Sheridan
Director of Real Property Management: T. H. Hefferan
Special Ass't for Excess Property: Robert Whittet



engineering design and technical problems between the military departments; monitors engineering, construction and design standards for protective construction and dispersal; maintains surveillance of design, construction and facility/maintenance programs in DOD; and sets policies and procedures with respect to installations aspects of emergency planning and continuity of government.

Work handled by the Reserve Forces Facilities Division is concerned with policies, standards and criteria for programming and planning of current and long-range requirements for Reserve Forces Facilities. It also coordinates the programs in this area, including use of the facilities. This division maintains contact with Bureau of the Budget, as does the Projects division, works as well with the State Reserve Forces Facilities Boards.

In addition to the three divisions under him, the Director of Real Property Management maintains a Special Assistant for Excess Property, underlining the emphasis which DOD is currently placing on getting rid of as much unused property as is feasible. Besides look out for this area of work, the Director is responsible for the policies, criteria and standards on acquisition, utilization, restoration and expansion of DOD Real Property.

The Director—working with his Special Assistant—also must assure effective implementation and administration of Defense Department real property management programs, represent DOD on real property management matters with Congress, General Services Administration, other government agencies, and non-governmental and international organizations. Finally, he must provide the Defense Department position on matters pertaining to the acquisition and disposition of real property, and evaluate real property holdings of the military departments to determine those appropriate for disposal.

The Real Estate Division of the Directorate works in the above areas, and aids the three services in getting real estate at equitable prices, using it in the most economical way, avoiding duplication, and complying with Defense Department Directives in this area. It manages the inventory control methods and procedures for government-owned and controlled property, and assures that acquisition and disposition of real property is in keeping with overall Defense objectives. The office is also charged with resolving any disputes on real estate matters among the services.

Probably one of the most important single factors determining the morale of the career military man is that of family housing—where his wife and children will have to live at the various stations in the man's career. Because of this, the work is handled by the Family Housing Division of the Office of the Assistant Secretary of Defense for P&I extends far beyond its face value. In charge of setting the policies for requirements determination, assuring adequacy of family housing, and eliminating over programming or duplication, the Family Housing Division has its hands full.

The major reason that this area has been a thorn in the side of Properties and Installations in the past is that it must necessarily take second place to the major operating expenses that are needed to keep the services on a cold war combat footing. And if this is true in the area of family housing, it is especially true in on-post facilities for the unmarried soldier. In this particular facet of the Properties and Installations effort, much headway is being made through thorough rehabilitation of existing facilities. At Vandenburg AFB, for instance, Air Force has found that for about 60% of the cost of new housing facilities, they have been able to completely overhaul existing quarters, making them entirely modern and up-to-

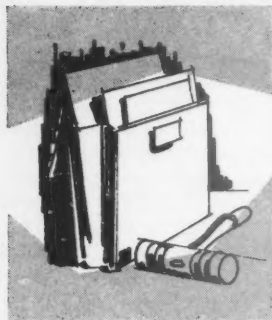
date. But if this is one solution to the problem, it is again worth quoting Cooper Benedict: "It is awfully hard for us to know any one thing that will be needed 25 years from now. Although we are battling a tremendous housing problem at the present time, all indications are that increased missile and firepower will cut the need for military personnel, even if only slightly. And even with this, the chances are that the missile facilities that we will have will be dispersed away from towns all over the country side. Which could easily mean that they will need new facilities."

Besides a tremendous liaison job with other agencies of the government, and interested civilian parties, the Family Housing Division must aid the military departments in obtaining government or private financing for their housing programs, in getting the legislation that is needed for the various programs, and assuring that the services comply with DOD policies on their housing programs.

Last of the divisions in the Directorate of Real Property Management is the Industrial and Commercial Facilities Division, taking care of the policies for acquisition, utilization and recapture of these properties. In connection with total mobilization planning, this office designates real property for the National Industrial Reserve, and administers the property so designated. This office must also assure that the proper security clauses are included in disposition of the property.

Working with the military departments, this division aids them in determining commercial/industrial real property needs, disposition of property by sale, lease of donation, in obtaining legislation as needed, and in obtaining property from Government agencies that has been declared excess, but which is essential to the service's needs. The division works with Office of the Assistant Secretary of Defense for Supply and Logistics in coordinating functions relating to equipment requirements for commercial/industrial facilities.

For a fairly small office—and one which does not seem to attract much in the way of publicity—the job handled by the Assistant Secretary for Defense for Properties and Installations would seem to be all out of proportion. But with the active aid of the services, and the continued competence of a tight-knit organization, the job will be as well handled in the future as it has been in the past.



THE GENERAL COUNSEL

DOD's Corporate Lawyers: Not size, but volume

ALTHOUGH he admits "for size, we can't stack up with the larger civilian law firms," the Deputy General Counsel for the Department of Defense, Leonard Niederlehner will quickly point out that the volume of business—and the vital nature of it—easily ranks this office with the largest law firms in the nation.

The job: to act as lawyers for the Secretary of Defense and his assistants on matters involving all areas in the Department of Defense. This entails all of the fiscal problems implied in an organization spending \$40-billion a year, and the international, logistic, and manpower problems which are incurred by an organization that has branch offices in every major nation in the world.

A few specific instances indicate the volume and importance of the business handled by the General Counsel. One case involving taxes on government inventories in California will result in a recovery for the United States amounting to \$60-million. With the invocation of the Taft-Hartley law in both the steel and dock strikes, the Defense General Counsel was asked to prepare affidavits indicating the impact of these on national security.

In the significant Greene decision by the Supreme Court, which at least temporarily scrapped the present Defense Industrial Security System, General Counsel was immediately brought into the preparation of briefs before the court, and is now involved in those actions necessary to comply with the court's decision. Although this case involves the entire Executive Branch of the government, DOD's General Counsel will provide draft legislation, and look over all of the possible methods of correcting the situation.

The alternatives are an Executive Order, passage of a statute by Congress, or a combination of both. These decisions have not yet been made, and it is going to take careful discussion and coordination with the other agencies of the Executive Branch before a decision can be made.

In other areas, the General Counsel has worked on studies required by the Congressional investigation of employment of retired officers, and such matters as patent settlements and other major legal problems.

As the chief legal officer in the Department of Defense, J. Vincent Burke provides legal advice and aid to the Secretary, Deputy and Assistant Secretaries of Defense and the Chairman of the Joint Chiefs of Staff. He also maintains surveillance over DOD personnel security programs, and assures prompt investigations of unauthorized disclosures of classified information.

He reviews DOD inspection programs to assure that prompt and proper action is taken on any fraudulent or improper practice by DOD officers or employees. Finally, he must develop the Defense Department Legislative program and develop a coordinated Defense Department position on legislation, Executive Orders and Presidential proclamations.

In this capacity, the Assistant General Counsels fulfill four specific functions: (1) advice with respect to the legal and related policy implications of DOD activities and plans; (2) interpret and prepare, or assist in the preparation of legislation, Executive Orders, regulations and policy directives required for or related to DOD programs; (3) provide legal advice with

respect to the implementation of laws, Executive Orders and policy directives; and (4) provide DOD legal and related positions on matters requiring consultation with or action by other governmental or non-governmental and, where applicable, international organizations, and in connection with Congressional hearings and investigations.

Besides the supply area, the Assistant General Counsel for Logistics serves to help with the legal problems for the Director of Defense Research and Engineering, Advanced Research Projects Agency, Properties and Installations, and the Assistant to the Secretary of Defense for Atomic Energy. An Assistant to the General Counsel is point of contact for the Health & Medical Reserve Forces Policy Board, and the Director of the Office of Administrative Services.

The General Counsel also maintains a Central Group, and a Legislative Reference Service. The first of these provides legal services for the remaining DOD offices (Public Affairs and Special Assistants to the Secretary), and provides legal services in connection with matters of organization, administration, investigative matters, and matters of Department-wide significance.

The Legislative Reference Service (1) assigns action on deadlines, status reports and follow-up for DOD legislative work, (2) assigns action for preparing the DOD position on legislative items, Executive Orders and presidential proclamations, (3) serves as legislative and Congressional document reference and distribution point, and (4) maintains historical legislative files.

As is indicated by Deputy General Counsel Leonard Niederlehner, the organization is sound: "I doubt if there will be any major changes in our organization in the near future. We have had our share of organizational problems. We took care of them as they arose, and we've had few organizational ills in the last several years."

—The People—

General Counsel

Hon. J. Vincent Burke, Jr.

Deputy: Leonard Niederlehner

Ass't General Counsel (Logistics): Jack L. Stempler

Ass't General Counsel (Manpower, Personnel & Reserve): Frank A. Bartimo

Ass't General Counsel (Fiscal Matters): Maurice H. Lanman

Ass't General Counsel (International Matters): Benjamin Forman

Ass't to the General Counsel: James J. Kearney

Director, Legislative Reference Service: Frank J. Sherlock

Research is the beginning . . .

These research rockets probe the upper regions of the atmosphere. The total flight of each vehicle is measured in mere minutes — yet the payoff is a rich harvest of facts about the little-known 'inner space' we must cross before we venture farther into the unknown.

At Westinghouse, research is the beginning. Research is the bright spark that sheds light on a world. In this world of Westinghouse, *research is first* — in terms of time, of facilities, of funds allocated. Over 185 million dollars are being spent this year by Westinghouse for research and development alone. Perhaps most important of all, research is first at Westinghouse as a long-term company policy.

The Westinghouse Advanced Systems Planning group (WASP) is evidence of this philosophy. Here, select scientists and engineers do almost nothing but think — planning for defense requirements due perhaps five years or a full decade from now. In 33 different defense system areas, WASP is a single point of contact between defense planners and one of America's largest and most versatile firms — with 29 different facilities capable of study, design, or manufacturing assignments.

Some of the most promising products of research from the world of Westinghouse are: *Thermoelectricity* — the direct conversion of heat into electricity. Important spacecraft applications are already apparent. Through *molecular electronics*, drastic reduction in weight, size, power, and heat dissipation requirements will permit space vehicles and satellites to perform a greater number and wider range of tasks.

Like the sounding rockets on this page, research at Westinghouse opens the door to new worlds.

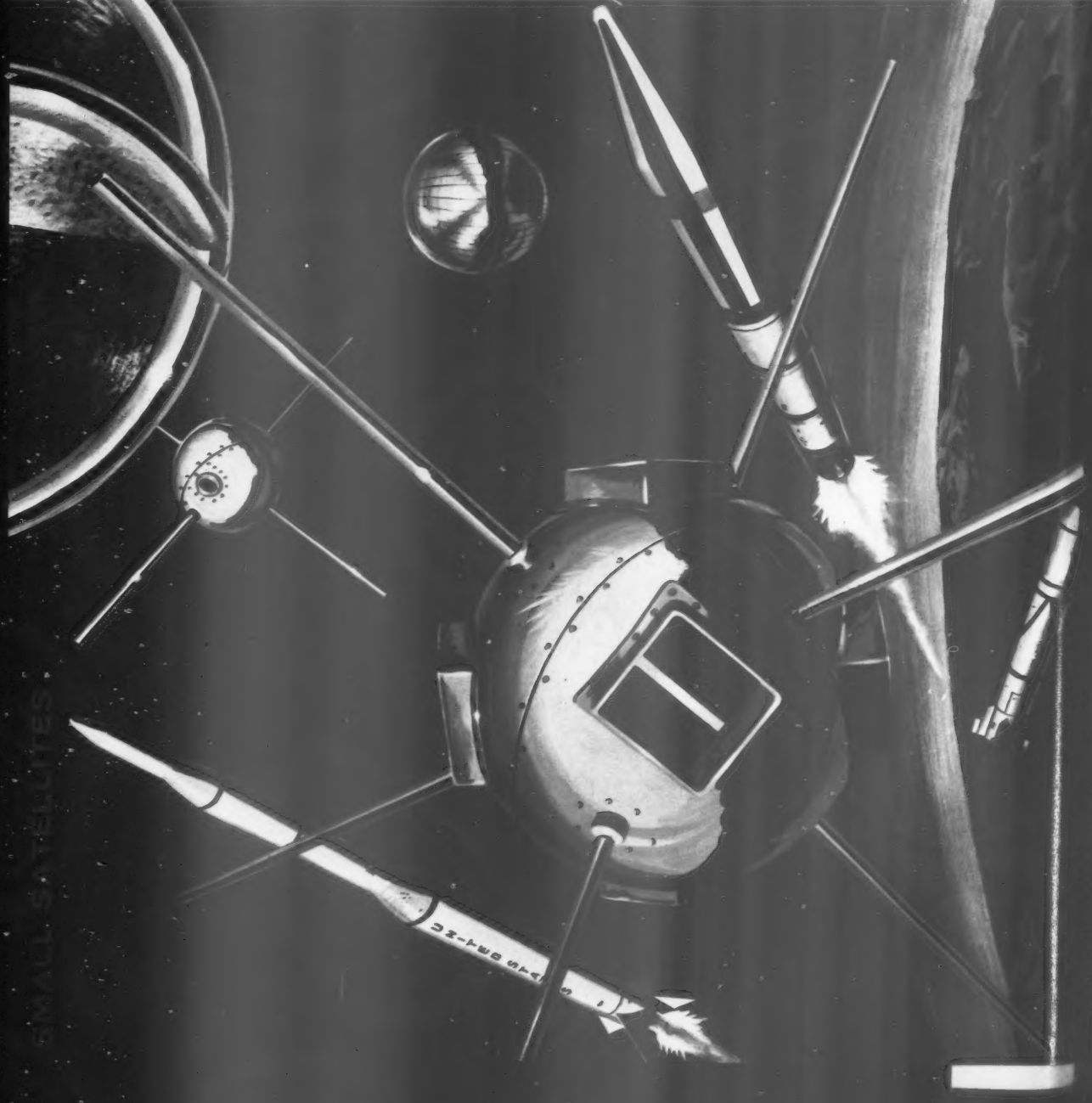
YOU CAN BE SURE...IF IT'S

Westinghouse

Illustrated, a Nike booster hoists an Asp rocket to an altitude of 37 miles, to study nuclear detonation effects. A Farside rocket (4000 mile ceiling) rises directly through the balloon which has carried it to the stratosphere. Arcon, an advanced general purpose vehicle lifts a 40 lb. payload 250 miles; and Aerobee — the basic high altitude exploration vehicle — rises to 193 miles in its latest Aerobee-Hi version. Argo is the rocket for the nuclear explosive investigation of the radiation belt that surrounds the earth.

From left to right: Argo • Nike booster for Asp • Farside • Argus Explosion • Arcon • Aerobee





Stepping stones to space . . .

In the history of the conquest of space, these vehicles will be counted among the true pioneers; they are the first American vehicles to orbit the earth.

Like the small satellites, which are test vehicles for large spacecraft, Westinghouse test equipment precedes and insures the flights of the future. Westinghouse is *the* single-source supplier of research and test equipment for the aero space industry.

Over half the wind tunnel horsepower in the U.S. was provided by Westinghouse. Today, radiant and rf heating, plasma jet, blowdown and shock tunnel facilities all over the country depend on Westinghouse power supplies and control systems. Westinghouse inductance coils helped achieve 32,400 mph in Hot-shot II tests.

Test stands for evaluation of any type of rotating equipment are other well-known products from the world of Westinghouse; a-c and d-c motor powered test stands for rotor blades, constant speed drives, generators, fuel pumps, and many other aircraft, missiles, and spacecraft components. For faster, more accurate research and production testing of these components, Westinghouse has designed a 400-cycle power generator and distribution system around the only 400-cycle high-frequency bus duct in existence. In yet another area, Westinghouse created the world's largest amplifier to vibration-test Polaris components.

Trade on this unmatched capability in standard or custom-designed test equipment . . . and minimize the problem of selecting and relating equipment from multiple sources.

YOU CAN BE SURE...IF IT'S

Westinghouse

Illustrated, the original American satellite, Explorer I, as it heads into its orbit. Vanguard I, the second successful satellite of the U.S., shows off its solar batteries which feed 'eternal' power to its electronic payload. Also shown: the full scale Vanguard satellite and the solid-fueled Scout satellite launcher due to fly soon. Scout will be the first economical vehicle to orbit a 150-lb. payload. Lastly, two inflated foil satellites: the globe is the forerunner of tomorrow's communications satellite, the other shape is a 'corner reflector' for radar tracking.

Clockwise: Vanguard I, (7 o'clock) • Scout, (9 o'clock) • Vanguard 22-lb. satellite, (12 o'clock) • corner reflector, (1 o'clock) • small-scale communications satellite, (3 o'clock) • Explorer I and Jupiter C booster, (5 and 6 o'clock).

AUTOMATIONS IN ORBIT . . .

Here are the first payloads-in-orbit big enough to shape our earth-bound lives. Communications, weather, reconnaissance and astronomy satellites

AUTOMATIONS IN ORBIT...

Here are the first payloads-in-orbit big enough to shape our earth-bound lives. Communications, weather, reconnaissance and astronomy satellites, each one paves the way for the time when human teams will supplement the robots now circling the earth.

Westinghouse, too, is helping to bring about the era of big spacecraft. Metals and materials shaped to space age needs are a major Westinghouse capability. The world of Westinghouse has already brought historic contributions to American metals technology: in steam turbine metallurgy, magnetic metal alloys, high temperature alloys.

Beyond basic research, Westinghouse materials engineering teams bridge the gap between ideas and applications — develop, evaluate and apply new metals and processes. Now, the new Metals Plant at Blairsville, Pennsylvania, calls on advanced facilities to create space age products through modern metallurgy.

Here, new materials and processes are developed, and the problems pertaining to their fabrication in quantity are solved in the pilot plant facilities. Equipment includes vacuum- and atmosphere-induction furnaces, vacuum-arc melting furnaces, bell-type furnaces and special quenching facilities. Other metal-working facilities include heavy equipment for metal conditioning, forging, pressing and rolling. For precision parts or intricate shapes, facilities for skull-melting, investment casting and sintered metal processes are used.

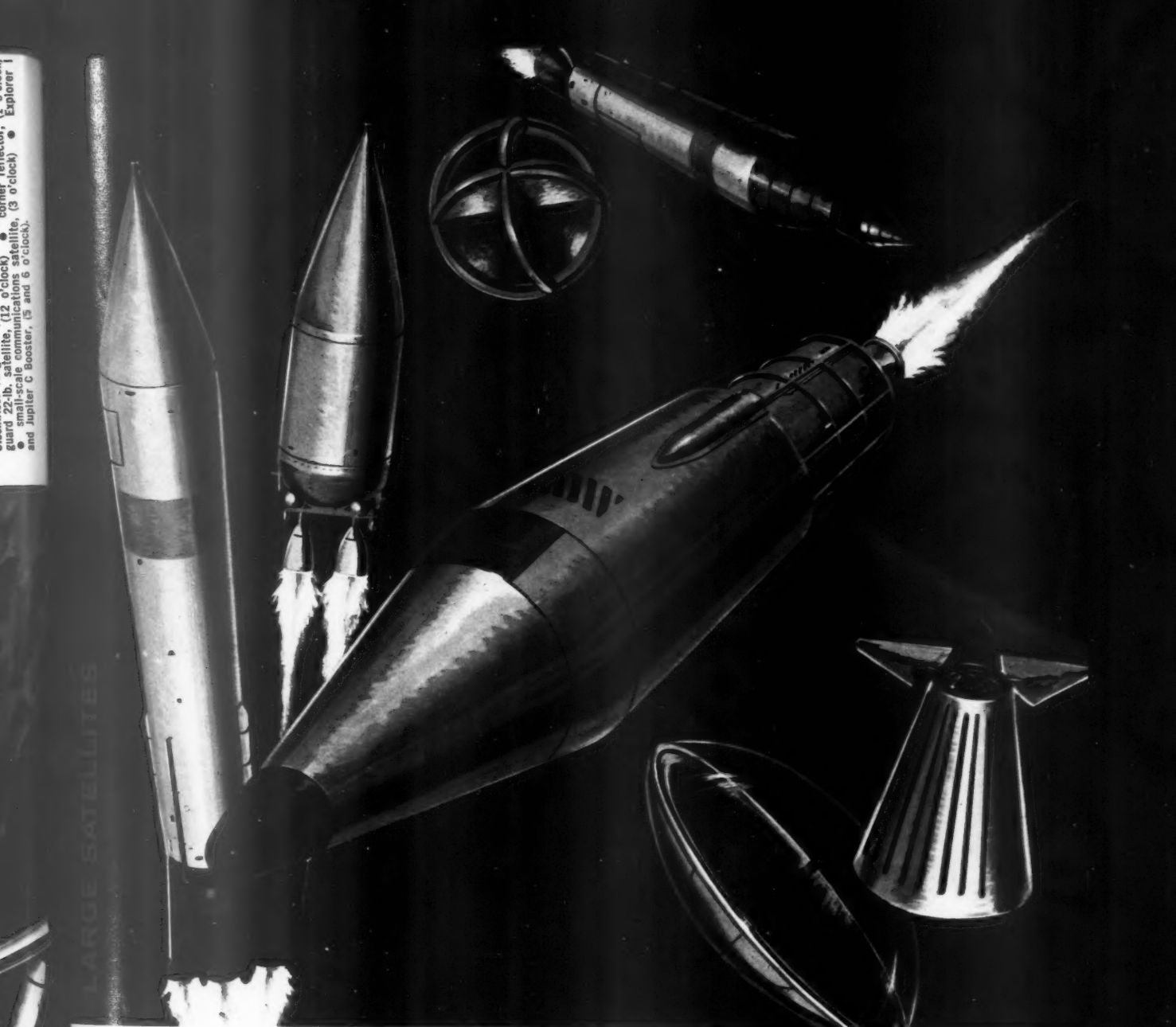
Here again, Westinghouse offers a one-stop source for you — from design conception, materials engineering, pilot runs to finished part. Here is your guarantee that the finished product will be right at every step. Explore the Westinghouse world of new metals for your requirements for space age alloys.

YOU CAN BE SURE...IF IT'S

Westinghouse

Illustrated, an inflated foil satellite, for global communications and TV broadcasting; an artist's impression of an observation satellite 'looking' at the world below; a larger radar corner reflector; a Discoverer package containing a recoverable capsule and a Centaur flanked by the payload of a sister ship, moving fast on its fuel of liquid hydrogen. Closer to the earth is Score, the 'talking' Atlas-in-orbit which carried the President's message to the world.

(Bottom, left) observation satellite and communications satellite; (bottom, right) Score; (center) Discoverer second stage; (center right) corner reflector; (top) Centaur, and Centaur second stage.



SPACECRAFT U. S. A.

Look for these spacecraft in the banner headlines of tomorrow . . . look for them in the history books of the future. All these fantastic craft will affect the shape of things to come in the dawning space era.

And Westinghouse will be a part of every flight. With a universe of research, development, and production facilities, Westinghouse contributes to every space mission. Sixty-one major manufacturing plants, 112,000 employees with 10,904 graduate engineers and scientists among them — this is the reality of Westinghouse today.

From the Westinghouse Advanced Systems Planning group to the Astronautics Institute and the materials development facilities, from missiles or spacecraft handling and checkout equipment to space guidance systems, here is *complete capability*.

Here are unique qualifications to take on and complete any space age project — from study and research, planning, materials planning and development right through to pilot manufacturing and mass production. And any phase of this total, system-coordinated capability can work for you.

Write Westinghouse Electric Corporation, 3 Gateway Center, P.O. Box 868, Pittsburgh 30, Pennsylvania.

YOU CAN BE SURE...IF IT'S Westinghouse



1. two-man deep space ship 2. Thor-Hustler booster vehicle 3. radar reflector satellite 4. The X-15 — first piloted space-airplane 5. Scout satellite launcher 6. Vega satellite- and spaceprobe launcher 7. Dyna-Soar glide bomber 8. Pioneer I moon probe 9. reconnaissance satellite 10. Nova space ship booster 11. Pioneer IV moon probe 12. Discoverer second stage 13. Centaur second and third stage 14. Saturn booster configuration with Titan second stage 15. Venus probe with solar batteries mounted on paddles 16. 100-foot foil satellite for global communications 17. Mercury capsule for manned satellite.

Free full-color reprint of this spacecraft panorama will be sent to you upon request. Oversized (30" x 20") full color reprints without advertising copy available for \$1.00 each. These quality reproductions are printed on heavy stock, are suitable for framing. Send all requests for reprints to:

Ramsen Advertising Agency, Inc., 155 Whitney Avenue, New Haven 9, Conn.

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Power is the key . . .

Right now, humanity knows how to fly to the moon, to the planets. Nothing new has to be invented: it's only a matter of developing the right hardware. Development of large rocket engines now becomes the real measure of space capability. Power is the key to the secrets of the solar system — and these booster vehicles are the embodiment of propulsive power.

And power for the space age is yet another area of Westinghouse pioneering. Westinghouse leads the world in atomic power, which requires no oxygen, is equally at home below the surface of the sea, in the void of space, or on the surface of the moon. The new Westinghouse *astronuclear laboratory* will work exclusively on such nuclear energy applications for outer space projects.

Here are some nuclear power milestones already marked by Westinghouse products: the first atomic powerplant to produce useable power in quantity; the Nautilus, the world's first nuclear-driven submarine; the Skipjack, the world's fastest submarine; the George Washington, first Polaris-firing submarine; the Long Beach and the Enterprise, respectively the first nuclear powered cruiser and aircraft carrier. The Shippingport reactor for electricity is another showpiece of space age power from Westinghouse.

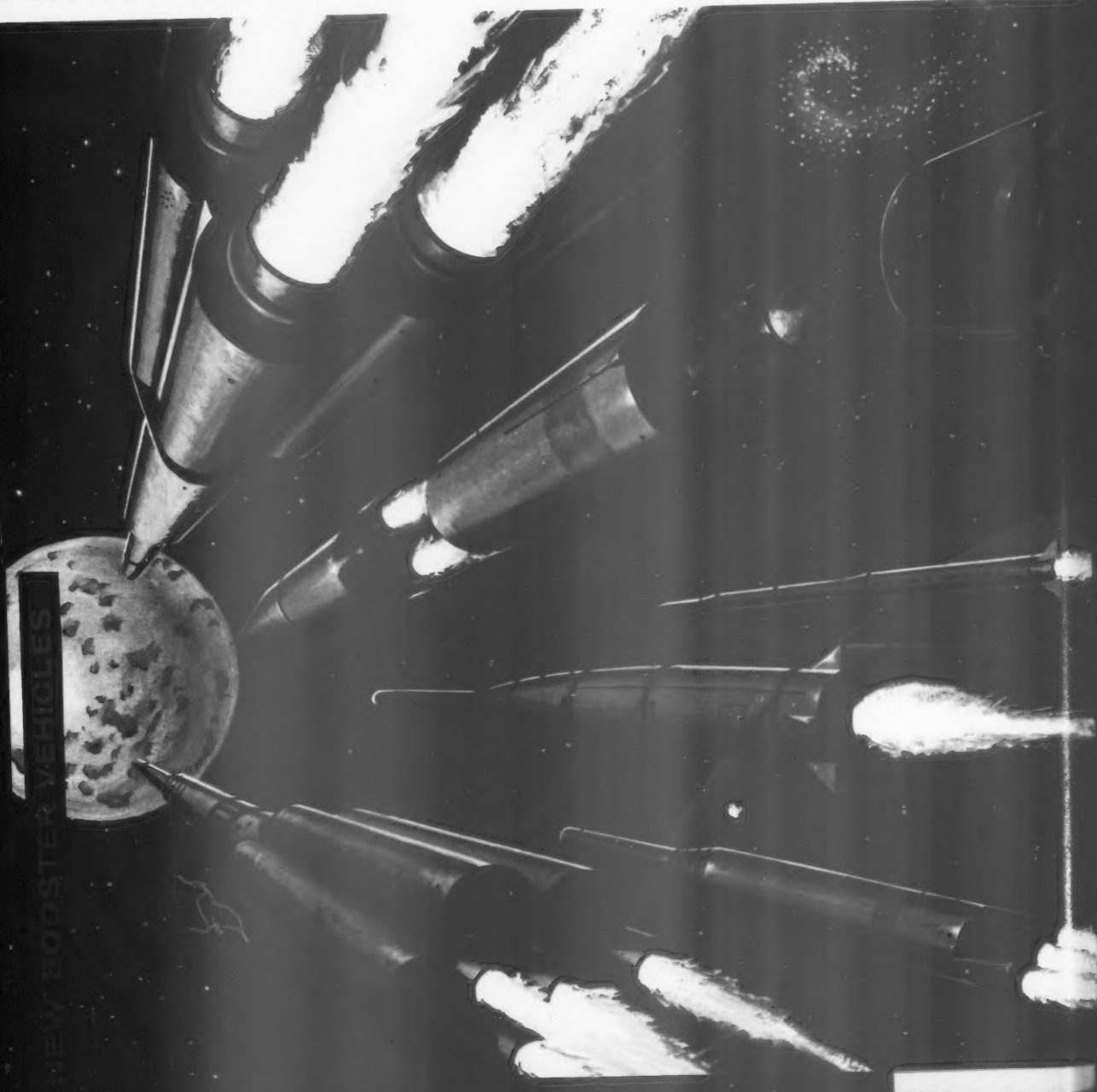
Other space era power sources will also come from Westinghouse. Look to Westinghouse for progress in thermoelectricity, propulsion concepts and systems. From the teamed efforts of the Westinghouse Atomic Power Organization, the Research Laboratories, the Aviation Gas Turbine Division, the Aircraft Equipment Department, the Astronautics Institute, the materials development facilities, and other creative Westinghouse groups will come new sources of power for craft and stations in space.

YOU CAN BE SURE...IF IT'S

Westinghouse

Shown: Atlas-Able and Thor Able — the slingshots which hurl small probes into deep space; and Scout, the prime mover of small satellites. Centaur, depicted separating its first and second stage, features a stage propelled by two rockets burning liquid hydrogen. Saturn is a tremendous eight-engine vehicle which develops a total of 1,300,000 lbs. of thrust in its first stage. Finally, there is Nova, the long-range hope of our space program. This monstrous rocket, more than four times as powerful as Saturn, may be able to return a 25,000 lb. payload from a Mars orbit.

Left to right: Saturn • Atlas-Able • Thor Able • Scout
Centaur • Nova



The supreme adventure . . .

Now Man has dared to reach out into space and see for himself. Now his world has grown to include the whole color system. This is the supreme adventure.

Left to right: Saturn
Centaur • Nova
Atlas-Able • Titan II

The supreme adventure . . .

Now Man has dared to reach out into space and see for himself. Now his world has grown to include the whole solar system. This is the supreme adventure.

This is also the supreme test of the electronic components that help put him in space, and help bring him back again. Reliability, compactness, light weight become all-important. Reliability and creative design — these are the two hallmarks of missile, aircraft and spacecraft equipment created in the world of Westinghouse. Look to Westinghouse as the source for consistent reliability and best design for all these: amplifiers, electronic and magnetic capacitors, circuit breakers, coils, contactors, cores, electronic tubes, gyros, spin motors, instruments, inverters, lamps, magnets, meters, motors, rectifiers, relays, semiconductor, switches, toroids and transformers.

The systems made up from these and other components are designed to capitalize on special qualities designed into each unit.

In addition, Westinghouse research work in the areas of high temperature electrical insulation, low-noise solid state microwave amplification, infrared, nuclear and high vacuum research has far-reaching applications in such system areas as propulsion systems, reconnaissance systems, space guidance and control systems. Of particular significance to the designers of sub-miniaturized electronic systems is a recent Westinghouse breakthrough in the method of semiconductor crystal "growth". This new development in molecular electronics may lead to the creation of outer-space equipment one thousand times smaller and lighter than anything now in existence.

YOU CAN BE SURE... IF IT'S

Westinghouse

Shown: The X-15, our first piloted space-airplane and the Dyna-Soar glide bomber, quickly darting out into the void before plunging back into the atmosphere; the Mercury capsule contains the first human-in-orbit. The Vega two-man capsule is seen as an artist's impression. The two-man spaceship with the long hull is headed for Mars or Venus — the other ship illustrated will be assembled while in orbit. The two-man re-entry capsules near the crew compartment are the launches of the space age, returning the travelers from the unknown seas to the familiar shores of earth.

Clockwise: Vega capsule, (7 o'clock) • Mercury capsule, (9 o'clock)
• Venus or Mars ship, (12 o'clock) • X-15, (1 o'clock) • Dyna-Soar, (3 o'clock) • deep-space ship, (5 o'clock)



Solar system scanners . . .

Hurling past the Moon, these spacecraft of today and the very near future are the unmanned reconnaissance craft of science. The great human voyages to Mars, Venus, Mercury, Saturn and Jupiter depend on what these robot explorers find — and do *not* find.

Just like the space probes, Westinghouse shows the way to the worlds beyond our world. For the spacecraft launching sites of the Sixties, for the missile sites of today, Westinghouse equipment excels in all these functions: transports — traction motors and controls for electric trucks • erector equipment — drives and controls • electrical and electronic checkout systems — power supply, control center, transformers, and instruments • launching devices — systems particularly suited to silo-type missile installations (underground or underwater silos may turn out to be the most practical arrangements for spacecraft of "Nova" size, which will be too large for gantry cranes). A leader in shock-resistant equipment, Westinghouse is uniquely qualified to supply components for hardened military installations.

Westinghouse also can provide electrical power for whole missile sites, including the required nuclear or gas turbine generator stations. Standby generating equipment is yet another Westinghouse capability. Too, Westinghouse has long specialized in such basics as distribution equipment, air conditioning, lighting, elevators and similar units.

For any space age project, for any or all phases of the project, it is in your interest to explore *first* the great world of Westinghouse. Contact your Westinghouse sales engineer or write Westinghouse Electric Corporation, 3 Gateway Center, P.O. Box 868, Pittsburgh, 30, Pennsylvania.

YOU CAN BE SURE ... IF IT'S

Westinghouse

Illustrated, a Pioneer I type of Moon probe drifting along the Moon's surface, about to take a picture of its far side. The gold and blue cone is the Pioneer IV probe, headed for an orbit around the Sun.

A Centaur second and third stage is racing past our view point in space, and an instrument pack is headed for a 'soft' Moon landing, its descent slowed by downward-firing rockets.

The alien structure coasting toward us is a NASA deep space probe, perhaps headed for Venus or Mars. The solar batteries positioned on paddles all around it are so arranged that one of them faces the Sun at all times; in this fashion, an eternal power supply permits continuous broadcast back to the planet of its origin.

Top to bottom: Deep space probe, Centaur, Pioneer IV, Moon landing

SPACE PROBES



THE Affirmative Action litigation defense extent security

The to Mun tent, Actual day-to-ing n press o speaker

The Service semina about efficient in DO the se in rel publica format

Publ ing of tary pa demon tains I organiz an into progr evaluat sistanc provid briefin groups

NOVE



PUBLIC AFFAIRS

*The job is to keep the public informed
as much as possible on what DOD does*

THE basic function of the Public Affairs office is to assist the Department of Defense in fulfilling its obligation to keep the public informed on defense activities—to the maximum extent possible, consistent with national security.

The five major offices reporting to Murray Snyder are, to a large extent, far more than staff assistants. Actually they handle a great deal of day-to-day operational effort in answering newsmen's queries, organizing press conferences, arranging for public speakers, etc.

The task of the Office of News Services is to assure prompt dissemination of authoritative information about DOD; to assure an integrated, efficient public information program in DOD; and to act as sole agency at the seat of government for the DOD in releasing official information for publication through any form of information media.

Public Services does the developing of policies and monitoring of military participation in public exhibitions, demonstrations and ceremonies; maintains liaison with national and civic organizations on DOD matters; assures an integrated, efficient public service program in DOD; and receives, evaluates, and renders appropriate assistance in filling requests for speakers; provides orientation programs and briefings for American and foreign groups; monitors the important Armed

Forces community relations program throughout the free world.

Security Review reviews for security all material originating within the DOD or submitted by sources outside DOD for review; reviews all information for public release originated within DOD or submitted by other executive agencies of the government for security and conflict with the policies of DOD or the national government; notifies proper authorities of apparent violations of information security coming to its attention.

Declassification Policy has the job of formulating integrated downgrading and declassification policies and programs for DOD, monitoring compliance with them and in general providing guidance, advice and assistance on downgrading and declassification of declassified material; also maintains liaison with other government agen-

cies, industry, information media, foreign governments and educational institutions on the subject.

The Department of Defense has long recognized that correspondents perform a valuable public service in the dissemination of news concerning the Armed Forces and that every reasonable facility within the limits of security should be extended them. A separate Accreditation and Travel Branch within the Office of Public Affairs assists correspondents travelling abroad, in groups and singly, to report on U.S. military activities world-wide.

Newest office in the setup, Plans and Programs, was set up largely as a result of the 1958 Reorganization Act, has as its job the coordination of public affairs planning with the Joint Chiefs of Staff, and the unified and specified commands; also monitors DOD public affairs policies and procedures for consistency with the basic policy of the Secretary of Defense and the U.S. government and handles the integrated development and implementation of public affairs plans, policies, programs and related DOD activities. Staffed with military representatives from all three services plus a civilian, P&P lays plans for the dissemination of information on upcoming defense projects or actions, coordinates these plans with other government agencies, as well as the JCS and unified commands, to be sure everyone is moving in the same direction.

Another, more telling though less

The People

Assistant Secretary (Public Affairs) Murray Snyder.

Special Assistant: B. B. Saymon.

Deputy Assistant Secretary: Chauncey Robbins.

Executive: John E. Carland.

Director, Plans and Programs: Colonel Robert F. Seedlock.

Director, News Services: Orville S. Splitt.
Director, Public Services: James G. Dunton.

Director, Security Review: J. S. Edgerton.

Director, Declassification Policy: Vice Admiral John M. Hoskins (Retired).

obvious effect of the new office has been an effort in an area never before covered to make newsworthy operations and government organizations more aware of the importance and value of their public information obligation. Said one officer in P&P: "A dividend of this operation, which was going on only informally before, has been an increased awareness on the part of activities both in and outside defense of what public information means. Some people now realize for the first time that they can't stamp 'secret' on a new project strictly for their own convenience and make it stick."

"Stronger Supervision"

Thus, in essence, the new office is one more step (along with the recently completed consolidation of all security review activities within the Public Affairs office) toward a goal outlined by President Eisenhower when the 1958 Reorganization plan was passed: "Stronger supervision and control by the Secretary of Defense over Public Affairs throughout the defense establishment has been a major goal in the Reorganization Plan. Because of their great importance in the effective execution of national defense programs, public affairs activities are today a major command re-

sponsibility. I look to the major commanders (of the unified commands) to insure that public affairs activities throughout all echelons of their commands properly reflect our national aims and objectives."

Snyder's job in essence: See to it that the American public and all its special elements are given an accurate picture of what is going on in national defense, at the same time not letting the advertising get ahead of the production department.

Because of the nature of its field of responsibility (public information and public relations), the PA office has an operations function as important as its advisory and coordinating effort. Within the large general outline of national security, it must let go of the facts on day-to-day operations on almost a "here are the facts, let the chips fall where they may" attitude. If it were something less than sensitive to the information demands of press and public it would very quickly be by-passed by reporters finding other, faster sources of news. This, of course, would destroy its effectiveness.

The office bases its entire operation on the philosophy that "an informed public is the best return on its investment," spelled out that philosophy in the directives setting up the office.

Snyder's office is the battleground

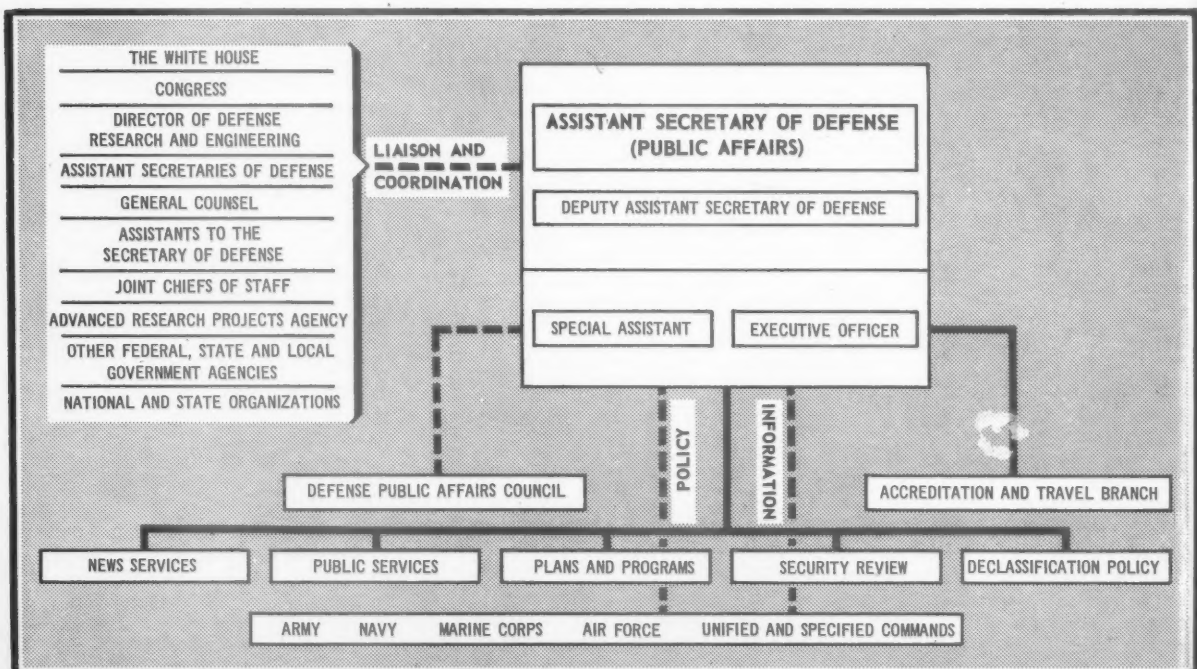
for two opposing philosophies. On one hand, the security-minded people who start with the premise that any knowledge is valuable to the enemy and work back. On the other, the news media—some of the best in the business cover the Pentagon—who would insist they never had enough information even if they were given every secret in the building.

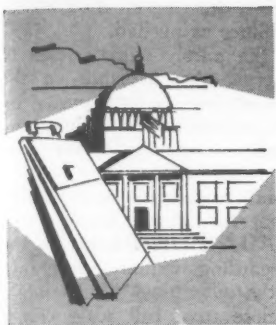
Too often in the past, PA has fluctuated between a close-mouthed censorship bureau and an everybody-tell-everybody-everything attitude. Under Snyder, they've walked pretty well down the middle of the road—a road which frequently appears more like the most sensitive tightrope in the Pentagon.

Because bringing together the two opposing philosophies with which they deal involves compromise, and inevitably an occasional knuckle rapping, Snyder's office, and even he personally, have occasionally reaped vitriolic criticism from one of the more crusading elements on either side of the battlefield.

But for people who have taken time enough to analyze the total operation, the best mark of how well his office has performed is that no one can recall a time when his own higher authority has ordered him to revoke a decision or "cease and desist" on a Public Affairs policy.

The organization responds to the job . . .





LEGISLATIVE AFFAIRS

Because Congress gives final approach, this office is a key link.

LEGISLATIVE Liaison is probably one of the most important Defense Department activities in Washington. Because Legislative Liaison, whether in the Office of the Secretary of Defense or in one of the services, is the official point of contact between defense and the Congress which, in the final analysis, approves everything defense wishes to do, ("except for fiscal matters") LL is a key link in the exchange of information and inquiries between (theoretically) the U.S. public, through Congress, and the defense establishment.

The job includes such things as coordinating the defense legislative program and arranging the appearance of key witnesses before Congressional committees, insuring that defense plans "take cognizance of Congressional implications," inform the top defense (or separate service) managers of Congressional activities and attitudes that may affect their own planning, and respond to Congressional requests and inquiries.

Regardless of how logical things may look to defense, Congress is, ultimately, the source of final approval or disapproval. LL's job, in essence, is to keep Congress aware of all the facts in any particular case in order that they make, or at least are able to make, a comprehensive decision.

From the standpoint of strength levels the separate services have larger legislative liaison staffs than OSD—primarily because they receive a great deal more Congressional inquiries, requests, and constituent questions. However, theoretically, OSD LL sits on top of the heap, has two primary functions:

1—Coordination of the annual legislative function (although the nomenclature and legal aspects are handled by the Defense General Counsel, and coordination "must be effected" with the Bureau of the Budget. Once a Defense legislative program has cleared BOB, a decision is made as to whether it will be retained by OSD or delegated, which most legislative programs are, to one of the services—usually

the one primarily or solely concerned. LL's job is to maintain contact with the legislation, see that hearings are scheduled, be sure that the appropriate witnesses within defense are available to answer Congressional committee questions, shepherd the legislative program through Congress and, if bugs develop, see that the right defense official is there before Congress to give them the answers they need.

2—Coordinate service LL activities: The basic philosophy here being to iron out the service disagreements on any plan, program, or project requiring legislation before the proposal hits Capitol Hill rather than holding their family arguments in public.

Historically, budget matters have been handled by the separate service comptrollers offices rather than by LL. There is, apparently, no logical reason for this other than past practice and the weight of rather imposing personalities within the budget picture insisting on the anomaly.

To editorialize a bit, the very structure which, at least in Defense Washington activities, should be most streamlined is, because of this budget peculiarity and other things organizationally bad and unsound from a management standpoint.

Almost without exception key "statesmen" in the defense top management structure state repeatedly that

one of the big reasons defense elements appear to be squabbling among themselves and unable to make a decision has been this matter of trying to obtain dollars. Yet by splintering the budget out of LL responsibility, the opportunities for conducting this interservice squabbling are multiplied greatly. Furthermore, in these times it is virtually impossible to talk money and not talk service or defense programs since, as any sharp comptroller will verify, programs are the initial consideration, expenditures are a result. By separating money from planning on Capitol Hill, it is all too frequently possible for the tail to wag the dog.

The other organizational headache: Although OSD LL theoretically has top policy making control over the LL operations of the three services, in reality its influence has not been very effective—primarily because of lack of awareness of this problem in the defense front office. In sharp contrast to the research and engineering and operational command functions, where the defense secretary has made it clear that OSD's director for research and engineering and the Joint Chiefs of Staff either are now or soon will be the ultimate authority, the insistence that all legislative effort be funnelled through the OSD LL office has never really materialized. The result, and considering the fact that the men involved are only trying to obtain all the resources possible (in these tight budget times) to do their jobs it is understandable, has been a ridge running, doorbell ringing political effort which has given Congress and the American public the impression that defense cannot make up its mind. This LL organizational anomaly is, of course, not the entire reason, but LL is the picture window through which the bulk of defense operations are viewed by Congress. Until the present organizational setup is improved, many defense observers are convinced that Congress and the taxpayer will continue to receive a picture of defense operations which is somewhat out of kilter with what is actually going on.

—The People—

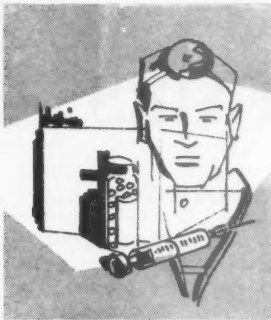
Office/Secretary of Defense
Legislative Affairs: Geo. W. Vaughan
Dep.: Maj. Gen. C. J. Hauck, Jr.

Army
Chief—Maj. Gen. R. L. Vittrup
Deputy Chief: Brig. Gen. C. D. Dodge

Navy
Chief—Rear Adm. John S. McCain, Jr.
Dep.—Capt. R. L. Kibbe

Air Force
Dir.: Maj. Gen. W. P. Fisher
Dep. Dir.: Col. B. Adkinson

Marine Corps
Brig. Gen. J. D. Hittle



Health and Medical

SMALLEST of the Assistant Secretaries' offices is that of the Assistant Secretary of Defense for Health and Medical. But the amount and quality of work that originates and is completed in the shop would easily belie its size.

In addition to the heavy day-to-day workload that is carried (Surgeon Generals' meetings, for instance, are held often), the ASD for Health and Medical is continually searching for new ways of doing a better job, and constantly trying to broaden the base of the job that it already handles.

Although it must create the policies governing a world-wide medical organization, it is interesting to note that H&M is not satisfied with just this—and is currently working to set up a system for joint, tri-service utilization of all medical facilities.

In an area perhaps more closely tied to management methods, H&M is trying to set up a standard system of record-keeping for all military hospitals, and a greater uniformity of records and reports throughout military medicine.

The office operates on a staff basis, with each of five assistants providing specialized knowledge to the Assistant Secretary as he needs it.

The areas covered by the Assistants are (1) Personnel, (2) Planning (including mobilization and disaster planning), (3) Material, (4) Construction and finally, (5) Professional Services, providing the Assistant Secretary with the information he needs on such matters as preventive medicine, research and development of health policy for military personnel and dependents.

The People

Assistant Sec'y of Defense (Health & Medical): Hon. Frank B. Berry, M.D.
Deputy Ass't Sec'y: E. H. Cushing, M.D.
Director of the Staff: Brig. Gen. S. S. Brownton.

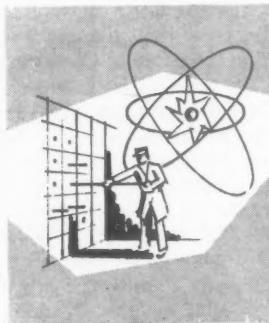
Ass't for Personnel: Col. H. S. Parker.
Ass't for Planning: Capt. Henry T. Cannon.

Ass't for Material: Col. Alfred R. Cannon.
Ass't for Professional Services: Col. Donald M. Alderson.

Ass't for Construction Programs: Cdr. E. W. White.

Besides the Assistant Secretary and his Deputy, H&M maintains a Staff Director, who coordinates and directs activities of the staff and handles certain special projects. These include advice and aid to the Assistant Secretary on health and medical matters, the Medical Education Program for National Defense, and coordination of national and international health and medical plans and programs (such as with NATO and the World Health Organization).

Although the doctors who are on the staff of the Assistant Defense Secretary for Health & Medical are quick to say that they will not initiate work to set up a Single Manager in this area, the unified effort that they have been able to get from the services is the best proof that such a change would be unnecessary.



Atomic Energy

LIAISON is the single word which most closely characterizes the work handled by the Assistant to the Secretary of Defense for Atomic Energy. Because Atomic Energy Commission has been designated as the number one government agency in this area, and because Defense Department has such a large share of the interest in atomic energy matters, it would be a mistake to underestimate the work handled by this office.

It is because of this relationship that the Assistant to the Secretary also works as Chairman of the Military Liaison Committee with Atomic Energy Commission. Because of the dual nature of his job, he is in an ideal position to formulate and insure compliance by Defense Department on policies, plans and programs relating to Atomic Energy.

Besides working directly with the Secretary of Defense in an advisory capacity, the Special Assistant for Atomic Energy works closely with the Director of Defense Research and Engineering and maintains contact with the Armed Forces Special Weapons Project and each of the

three services, drawing on their advice and/or facilities as needed.

Beyond the purely military uses of atomic energy, the Assistant to the Secretary must keep himself posted on the various peaceful uses of the atom, as they apply marginally to the military.

As the military touchstone for AEC, the assistant for atomic energy supports AEC before the Bureau of the Budget regarding military programs. Although the office does not maintain anything close to a full scale controller operation, Assistant Herbert Loper explains, "we do take a look at these things. What we can tell BOB is that we need the item being considered. We don't look at the cost."

To aid him in getting his job done, the Special Assistant to the Secretary of Defense for Atomic Energy maintains five divisions, covering (1) Administration, (2) Special Projects, (3) Materials Production, (4) Nuclear Power, and (5) Weapons.



Special Operations

WHILE "Special Operations" is a fairly vague term for an office title, it is one that is made necessary by the highly classified nature of the work that is carried out by the Assistant to the Secretary of Defense for Special Operations.

The areas of responsibility for the office are primarily intelligence and security planning, and military psychological and unconventional warfare plans and doctrine.

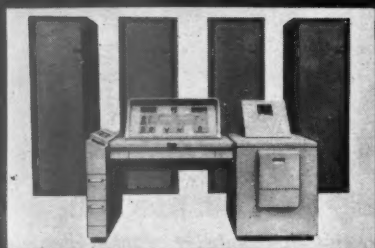
With less than ten officers working in the Special Operations shop, it is plain that the role is mostly one of developing policy and monitoring selected operations. In its areas of responsibility, this office serves as the focal point for the three services. It also provides liaison with elements of Defense Department and National Security Council and the Operations Coordinating Board. Special Operations also provides policy advice and coordination of DOD relationships with the Central Intelligence Agency.

ARMED FORCES MANAGEMENT

**The Checkout
that says
"GO" or "NO GO"**

APCHE

(Pronounced
"AP-SHE")



APCHE (Automatic Programmed Checkout Equipment) is a solid-state, universal, high-speed, highly reliable, compact general-purpose tester designed especially for automatic checkout of aircraft, missile and space systems and their supporting systems. In its various versions (differing in input media, size and weight) APCHE installations may be fixed, mobile, airborne or submarineborne. APCHE was designed and is being produced as a part of RCA's ground support electronics subcontract from the Convair (Astronautics) Division of General

Dynamics Corporation, prime contractor for the ATLAS Intercontinental Ballistic Missile.

The system being supplied to Convair for the ATLAS Program includes a console and four rack cabinets providing both analog and discrete test functions with a resulting printed and GO-NO GO indication. As a product of RCA's Missile Electronics and Controls Department, Burlington, Massachusetts, APCHE is one of the latest RCA developments in the field of military weapon readiness equipments.



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THE ARMY...

With fewer resources and a growing job, this is where Army is headed



From the nuclear Red-Eye missile, to Lacrosse, or the 100-lb. mortar, the U.S. soldier packs more firepower than ever before.

RIGHT up against the Iron Curtain in both Europe and the Far East, the Army is growing more and more concerned with the calculated risk it has been forced to take (primarily through decisions other than its own) in reducing its capability.

Squeezed by inflation, a stagnated percentage of the budget, a constantly shrinking manpower ceiling, Army's world-wide commitments have grown continually more complex and expensive. The result, says Army, in too many instances has become lately a matter of "allotting shortages" across the face of the globe.

Army's attempts to obtain the minimum resources it believes it needs to do its job have almost invariably been met with "would you rather have more people or more modern hardware?"—which, said one high-ranking general, "is like asking would we rather lose an arm or leg."

The Army's basic problem, as faced

by its Pentagon front office, is evaluating how well it is doing its preparedness job in peacetime. Says Army's Vice Chief of Staff General George H. Decker, "There is no yardstick to measure achievement against such as exists in industry's profit and loss statements."

In evaluating where the Army is today, where it is headed, Decker (who in essence is Chief of Staff Lemnitzer's alter ego in running the Army) can find a good many plus signs, about an equal number of black marks. To a growing number of the Army's top commanders, however, (and its real top managers, whether they approve of the title or not) the black clouds are beginning to blot out a good deal of the sunshine.

As long ago as five years back the complaints began to rumble into Washington headquarters, could well erupt in the near future in an explosion best described by an operations officer who

said, "It is time we stopped accepting just a little bit less than what we need to do the job, scrounging whatever else we need from inventory or borrowing on our future. It is time we explain in no uncertain terms that 80% budget appropriation means we can do only 80% of our job. The process we are going through now is, in reality, Army disarmament through attrition."

Among the black clouds: on its current \$9.8-billion budget, Army can support only 14 active divisions. Moreover, there are a lot of manpower and equipment holes in both these divisions and their logistical backup.

The question of modernization is another one on which Army has drawn a near blank. Faced by an overwhelming Soviet Army numerical superiority (not to mention that in China) the Army wants to have a qualitative advantage in firepower, mobility, communications. However, they have received only about half this year's \$3-

ARMED FORCES MANAGEMENT

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billion modernization request. This has meant, basically, they have not been able to take advantage of what the Army terms the "fine work being done in R&D."

Examples: Although M-14 rifle was ready for production more than a year ago, none are now in the hands of troops. The Army's much-ballyhooed missile arsenal of a second generation nature—Hawk, Nike Hercules, Sergeant—is in similar shape. A dearth of hardware prevails in the much applauded but largely unproduced (for lack of money) fields of tactical nuclear weapons, deliverable chemical and bacteriological munitions.

Army today can barely keep three STRAC outfits going—although Army Operations people call the concept "one of the best things that has happened to the Army in years."

Overseas, U.S. treaty commitments, declarations of policy, and agreements around the world have forced Army to borrow from its future to pay for today, to whack at the personnel strength of both STRAC and Continental U.S. forces. Even at that, the Army reports they have far too few people in a Red-tinged hot bed, the Caribbean, and in Alaska, are in tight supply in our world-wide military assistance advisory groups and missions—even though these units reportedly do the U.S. more good per dollar invested in the cold war than any other U.S. foreign policy effort.

There are some rays of sunshine, some outstanding examples that where the Army has been given and/or funnelled resources to a high priority effort, the results have been remarkable. Maintenance of combat ready forces around the world, as a task of and by itself, would be termed by many as accomplishment enough. The Seventh Army in Europe is as efficient as any Army outfit which the U.S. has ever operated in peacetime.

Army's MAAG and mission accomplishments have earned applause almost unanimously among our foreign allies—whether politically inspired headlines say so or not. In Korea (the only foreign nation in the world whose forces are under control of a U.S. general) the Army has been almost completely reorganized, is today one of the strongest free world armies in the Far East. Viet Nam's armed forces were virtually non-existent ten years ago. Today they are a strength to be reckoned with in the war torn Orient.

Soldier of the Future? . . .

Good management and sound planning will do much to make the above conception a reality.



gains through good management . . .

Army has been and is extending its ground-to-air defense (Nike Ajax and Hercules) overseas. The short-range missile developments, to supplement artillery, present the Army with a possible punch it has never before possessed—even though many of the newer, better missiles are still in the R&D stage.

The Army's initiative in reorienting its doctrine, organization and equipment to future requirements has been well documented. Significant progress has been made in development of means to improve the Army's ability to shoot, move, and communicate, on either the nuclear or non-nuclear battlefield. However, as noted earlier, many of the items necessary are not in the hands of troops because of lack of funds to produce them in adequate quantities. The Army's advances in air mobility particularly have been impressive, although somewhat hampered by a seemingly arbitrary limitation on size and weight of aircraft, and by a lack of sufficient resources to get the more sophisticated and more effective hardware off the drawing board and into the field.

In the business management field, as it pertains to Army, streamlining efforts include considerable improvement in the past few years in financial management, in the use of stock funds, and in evaluating performance of subordinate commanders. Although this "big business" aspect is rarely noted, an item-by-item listing of the accomplishments here would be almost endless.

Says Decker, "We are still not going to solve the problem totally by better management. The military mission must remain our first consideration—but if we can improve the way we manage the business at the same

time, we look on it as a big bonus."

To some extent, this philosophy accounts for the spectacular success of the Army's Management School at Fort Belvoir, Va., and for the notation that it is unlikely a man will be selected for one of the top jobs in the technical services, for instance, unless he is aware of and subscribes wholeheartedly to the Army's concept of good management.

But for all its accomplishments, the Army's headache in today's cold war environment remains monumental, and grows worse each year. The headache is really two-fold—a lack of money to modernize and a lack of the men it needs to fill up some of the holes in its force structure (approximately 900 to 925 thousand).

Although in the long run it may mean economy, modernization takes money. For example, three H-34 helicopter battalions could do the work of four transportation truck battalions in hauling a given number of troops over a given distance in a given amount of time. But a truck needs one hour of maintenance for every twelve hours of operation, a helicopter nine hours of maintenance for every one hour of flight. Furthermore, training a helicopter mechanic takes three times as long. This is only one example. There are hundreds of others.

Yet, to quote Lemnitzer, "To realize the capabilities in land power, the Army must be fully modern in its weapons, equipment, organization, doctrine and outlook."

Concerning the building of a modern Army, the head of the U.S. Continental Army Command, General Bruce C. Clarke said recently, "Congress must be made aware of the urgent requirement to provide all components with up-to-date facilities and

equipment. Units must be provided with modern and serviceable equipment to the extent that they can maintain it efficiently. We need the green lights and the green cash."

Adds Army's top man, Secretary Wilber M. Brucker, "a prerequisite to any discussion of our Army today is a complete realization of the global nature of its mission. Forty per cent of Army's total strength is serving in more than 70 foreign countries and areas. In my opinion, the greatest single asset we have today is this attitude and habit of thinking—and I have seen it everywhere—which is ready to cast away any outmoded ideas while seeking with a high degree of originality and imagination to stay ahead in an age when technological advancements occur with breath-taking speed.

"(But) in the tough competition of power politics, while all forms of military power are essential, there can be no substitute for adequate land power, as the United States has learned time and time again. The inexorable logic of our times makes the Army more important today than it was yesterday, more important three years from today than it is today."

Army's contention that, no matter what type of war looms over the horizon, it will be won—at least on the ground—by men and not machines has apparently gained little recognition. Yet, it is as foolish to assume that tomorrow's battle will have no place for Army as it is to assume that tomorrow's space war will have no room for manned space vehicles. Unless the Army begins soon to receive a bigger slice of the pie (or we enlarge the pie altogether) Army capabilities will become ever more questionable (whether in today's or tomorrow's terms) simply because the resources needed today to prepare for tomorrow aren't being provided.

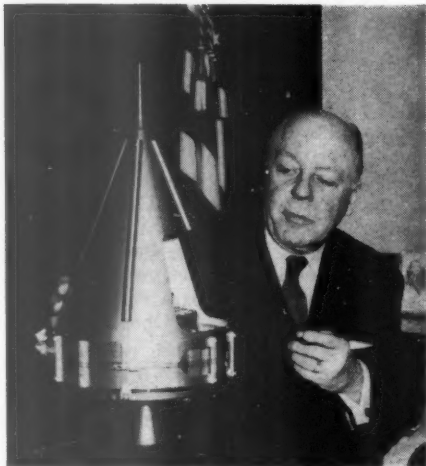


Mobility multiplied by firepower can do much to equalize superior numbers, is high on the list of Army modernization plans.



This 106-mm. recoilless rifle makes a near-tank out of a jeep, is one of many weapons designed to keep Army modern.

Army Secretary Wilber M. Brucker:



"Horse Sense" In Army Management

IT has been said, by people who greatly admire his business talents, that when 65-year-old Army Secretary Wilber Marion Brucker "is pleased, the Army is elated; when he is perturbed, the whole Pentagon shakes."

He has earned that bouquet not by being a tough-talking whip cracker but by the sheer weight of his own hard working example. Brucker's devotion to his job is unquestioned. The Army, world-wide, devotes to him, in turn, a measure of support, admiration and allegiance rare in military circles.

To confirm this atmosphere, requires only about a half hour talking to his aides in the spacious, but heavily populated, executive suite in 3E718, overlooking the Pentagon's mall entrance. When Army men stop to evaluate how well Brucker has done in the four and one half years since he became Army's top man, they almost invariably conclude with: "He's probably the best secretary we've ever had."

In the office by 8 every morning, he seldom leaves before 7:30 or 8 in the evening, except to keep a business-social commitment some place in town or catch a plane for some military installation around the world. More widely travelled than any other person in government since the late John Foster Dulles, in his "tour" as Army Secretary he has visited every Army Command overseas and in this country, many of them several times.

It is a significant key to the way he performs his job and the reason he has been successful. Although it tends to look like sentimental slush in print, Brucker is absolutely sincere in his

basic faith in the integrity of the individual, has geared his entire system of managing the Army to that faith. Just as he firmly believes man will be the deciding factor if we ever fight another war, so he also believes that man, the human individual, is the first priority ingredient in how well and how efficiently Army manages its operation in peacetime.

Why all the trips? Says Brucker, "I visualize my job not as an expert at operating the same machines as every individual under me, but at getting at every portion of the business. The Army today must be management conscious."

"To do this, we must personalize the management idea. It can be done by going out to these places, pointing this out to all the people concerned with it, no matter how far down the line. Learning to know the individuals at every level and observing their operations, is important to a manager."

To Brucker, his biggest, and toughest, job in Army management, "is to make aware to the people running the business side of the Army the importance of the application of just good old horse sense. We are trying to get everybody to do it."

"We have made a great deal of progress in management aids—in fact, if we hadn't had the progress of the last few years, we couldn't handle today's large, complex Army business. But this progress has only increased the value of common sense. The machines make it more important than ever that we look beyond the radiator of the car to see where we are headed

—and this can only be done by people."

Born in Saginaw, Michigan in 1894, he graduated from the University of Michigan in 1916.

With three years experience in the Michigan National Guard under his belt, Brucker attended the First Officers' Training Camp at Fort Sheridan, Illinois, when the U.S. entered WW I, was commissioned a second lieutenant in the infantry. Shipped to France with the 42nd (Rainbow) Division, he saw action in all the division's engagements including Chateau-Thierry, Saint-Mihiel, and the Meuse-Argonne, was cited for bravery under fire and awarded the Silver Star.

After the war, he rose from Saginaw County's Assistant Prosecuting Attorney to Prosecuting Attorney, moved to the state capitol (Lansing) as Assistant Attorney General in 1927, became Attorney General in '28, was elected State Governor in 1930 and served until 1933.

"I discovered even then that the things I favored, my top people watched closely. I had to be very careful to pay attention only to the important things."

He has carried that philosophy into Army's Pentagon front office, attributes the early and rapid success of the Army's Management School at Fort Belvoir to the fact that "we got the top people in very early and the others followed." On a wider scope, using the same technique has developed a new Army-wide interest in the business side of their setup. The real dividends are yet to come, but the amount

what individual integrity means . . .

of activity and energy being devoted to management improvement is unmistakable.

"I have developed a tremendous respect for the people operating the Army. If people knew of the superior practices we now use and are developing, there would be a great deal more applause than the sniping that occurs from time to time."

When Brucker relinquished the Michigan Governor's chair, he became a trial lawyer, was one of the top men in the law firm of Clark, Klein, Brucker and Waples in Detroit in 1954 when Defense Secretary Charles Wilson asked him to serve as Defense General Counsel.

Said Wilson, "You have been saying a great deal lately about every citizen's obligation to his country. Isn't it about time you accepted your own challenge?" Reluctant, for business reasons, to leave just then, he let Wilson egg him into coming down to Washington the next Sunday "just to look things over," has been here ever since.

"It probably sounds like high flown oratory, but I took the job because I had believed for a long time that the country needed the active support of people with a background in both public and private life. I felt I owed it to the country."

Intending to stay two years, Brucker received another phone call from Wilson in mid-1955, just thirty minutes before he was scheduled to testify on Capitol Hill. The gist: "I want you to be Secretary of the Army." At the time, Army morale was at rock bottom, they had just received a jolting black eye in the ill-famed McCarthy hearings. The job was something considerably less than appealing.

Said Brucker, "Let me call my wife." Advised Clara Brucker, who probably would have preferred to go home to Grosse Pointe Farms, Michigan, "Well, of course."

Brucker decided what the Army needed most just then was strong civilian leadership, decided too that he wanted to try to provide it. Looking back now, Brucker says of the job, "Whoever sits in this chair, if they are dedicated and devoted to the work, they have a marvelous opportunity to do some good for the country. Of course, you have to take a lot of gaff, and learn to roll with the punches, and keep pushing hard for what you believe in."

Businessman, management expert, orator, politician, Brucker has a tremendous memory for names, an even more impressive self-taught capacity for grasping the detailed contents of documents which cross his desk. He has been known to read the biographical sketch of the honored person 15 minutes before an award ceremony and without further reference to notes recite with astounding accuracy the most minute details concerning dates and events.

Determined to squeeze every last usable second out of any working minute, Brucker sets a pace that his younger military assistants have trouble keeping up with. (More than one colonel being transferred elsewhere has looked on any new assignment out in the field as a vacation.) He sets a man-killing pace for himself (examples: an average of eleven to fourteen speeches during the five days of Armed Forces Week ever year in such widely scattered spots as Baltimore and Los Angeles; a typical field trip will take him from Virginia to Nevada and back in

three days with a minimum of six stops in between for speeches, conferences, interviews), expects the people under him to work just as hard, if necessary, to get their own assignments done.

If Brucker can be accused of bigotry toward anything, it is complete intolerance of inefficiency and poor production. If he finds a careless performance or operation, he will lean on it "pretty hard."

On the other hand he does not believe in slapping on high level control to eliminate it but rather in "encouraging the people concerned to grow into their jobs." Last, he is quickly irked by directives from higher authority which tend to limit the control and flexibility of his own managers. (Example: the Spare Parts Quarterly Report required in Operations and Maintenance activities.)

"Not only do they tend to worsen rather than improve management, but they tell the people responsible, in effect, 'you aren't smart enough to do your job yourself. We have to watch you.'"

He adds, "You might say that if we took off controls, the Army would go hog wild. But I am convinced human nature is essentially honest, every man here tries to do a good job. Of course, we do occasionally have to exercise controls, but they are being used only to spot honest mistakes. I can cite you hundreds of examples in every area of our operation where the mistakes we do find, compared to the total picture, are definitely minimal."

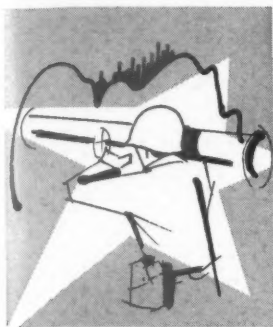
"I have detected here within the last few months a new eagerness to accept recommendations from anyone who offers them on ways to improve our management, an increased desire to mingle with business and exchange information. We have much to do yet but we are already well past the starting line—something not many people recognize."

Many jobs make up the total picture . . .

NOVEMBER 2	
APPOINTMENTS	
8 8:30 HOUR BRIEFING ON ARMY MISSILES	2 CONF. GEN. LEMNITZER
9 9:30 COURTESY CALL BY NEW FOREIGN OFFICIAL	2:30 CONGRESSIONAL DELEGATION (CLOSING ARMY POST)
10 9:45 ARMY STAFF MEETING	3 3:45 WHITE HOUSE MEETING
10:30 CONF. SECY OF DEFENSE	4 4:45 INTERVIEW WITH MAGAZINE WRITER
11 11:45 LUNCHEON ADDRESS BEFORE VETERANS MEETING	5 5:30 RECEPTION AT PHILIPPINE EMBASSY
12 SHERATON PARK HOTEL	6 7:30 DINNER AT BRITISH EMBASSY

One day from a busy calendar, the continuing problem of community relations, and administrative duties pertaining to the Panama Canal Zone show only a small part of the total job, but serve to indicate the many problems inherent in Brucker's position.





OPERATIONS

*pace-setter and steering influence,
this office sets Army's requirements*

THE pains of the resource squeeze on Army come to a head in Operations.

Pace setter even for future concepts, Operations has a steering influence on everything else that happens in the Army from budgeting and personnel training to supply. Although the complaint is voiced universally by Army top managers, the budget headache is evaluated most succinctly by Operations: "The past year was a period marked by increasing budgetary problems and the year ahead will be equally difficult. Fundamental requirements of the Army were not and will not be met because of lack of funds. Modernization of Army equipment is lagging seriously.

To keep daily operations going, maintenance of equipment and facilities has been allowed to fall behind Army uses up 10% of its inventory each year, manages some modernization by replacement—but they are not completely replacing what wears out, are in effect undergoing disarmament through lack of buying power."

These problems stem primarily from the necessity for Army to hold the line on its obligations and expenditures, or in many cases, to live with less, in the face of (a) increased requirements for vastly more complex and expensive weapons, weapons systems and equipment; (b) continued rises in costs, and (c) increased demands to support unanticipated and unbudgeted activities in trouble areas of the world—such as Lebanon, Taiwan, and Berlin during the past year.

"Notwithstanding the magnitude of these budgetary problems, the Army has made substantial progress over the last several years in developing a central financial management system which endeavors to bring maximum value for each dollar while providing field commanders as much flexibility as possible to use their resources to best perform their assigned missions."

Gearing its thinking to Joint Chief of Staff plans, Ops uses the same 10-year planning cycle (over-simplified: long range qualitative planning, mid-

range quantitative and current year budgeting). Thrown on top of the rest of the burden is responsibility for military assistance program training, or at least that portion contributed by the Army—which amounts to most of it.

Recent reorganization of the Joint Chiefs of Staff responsibility for Operations tri-service-wide has thrown Ops into an evolutionary period, has not lifted any burden off the Ops staff at all because of the continuing wide range of coordination required.

One hoped-for way out of the budgetary woods is an "Implication Statement" set up as a new thing this year by the JCS joint programs office. It will provide in writing what the impact on capability is of less than

'magic formula' idea of our living with about 23% of the DOD budget. As things stand now, we confine our planning only to reasonably attainable requirements, we don't even talk about pure requirements anymore—those which, if we had them, would mean almost no risk of non-preparedness in case of war."

An example of what the Army means when it talks about the resources problem is its Strategic Army Corps—"One of the finest things that has happened in the Army." Staffed, equipped, and funded 100%, it was whacked back from four divisions to three this year, even though it is a number one priority item with the Army. An extensive, detailed study (even before the word went out that Army would have to pare down some place) concluded that one place to cut was in STRAC. Restrictions on force levels have made it increasingly difficult to hold in STRAC units the level of fully trained men considered necessary for combat readiness—at the same time that growing complexity and longer training periods for more advanced weapons and equipment were demanding more people and more time of each individual in the STRAC units.

Where does STRAC fit in the Army future? Said one officer, "That's a good question. Without it we don't have the flexibility we need. But I can't answer your question because we have no idea where funds and force levels for the Army are headed."

Within this environment the DCS/Operations functions. His decisions are effective Army wide.

He is responsible to the Chief of Staff for: (a) Directing, supervising and coordinating preparation of all U.S. Army plans, including Army aspects of joint plans, and of the troop basis for major units and deployments; (b) directing, supervising and coordinating the execution of approved U.S. Army plans in all military operational activities and coordinating implementing plans therefor; (c) advising the Chief of Staff on Joint Chiefs.

The People

Deputy Chief of Staff/Military Operations
Lt. Gen. J. C. Oakes

Assistant for International Affairs: Maj.
Gen. E. G. Farrand

Executive: Colonel F. K. Newcomer, Jr.
Air Defense and Special Weapons: Brig.

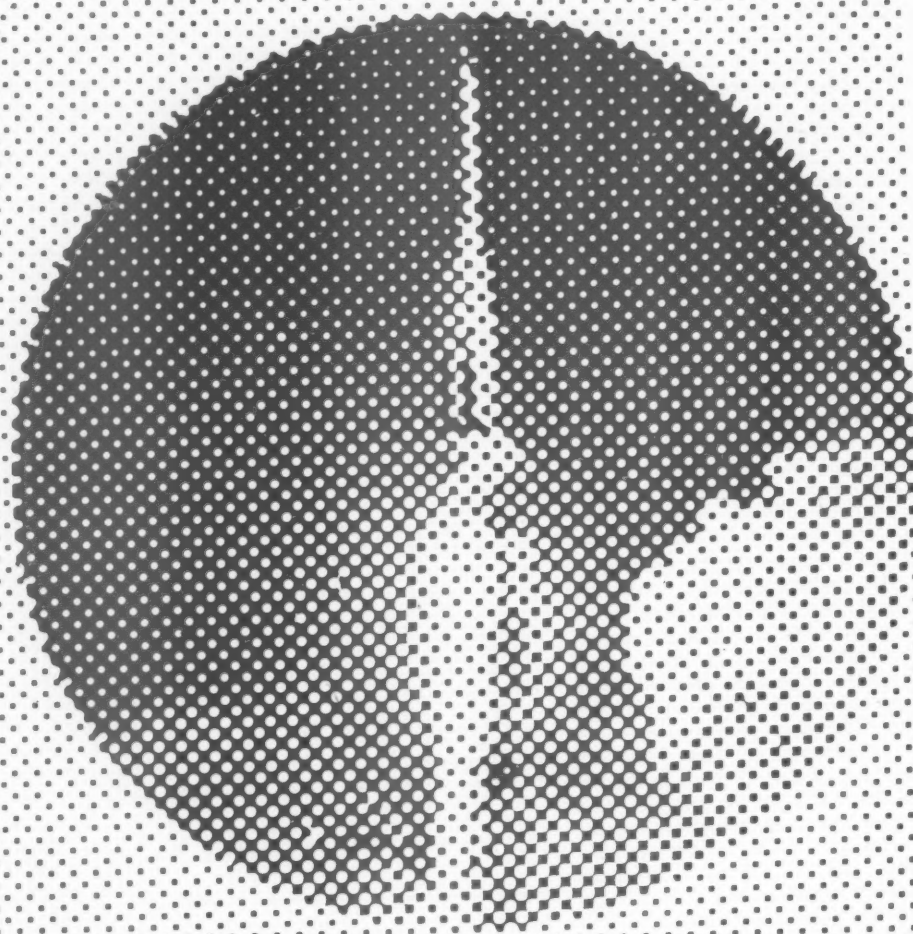
Gen. J. T. Snodgrass
Army Aviation: Brig. Gen. C. F. Von
Kann

Operations: Maj. Gen. F. T. Pachler
Organization and Training: Maj. Gen.
O. C. Troxel, Jr.

Plans: Brig. Gen. J. K. Woolnough
Programs and Budget: Brig. Gen. S. E.
Geo

maximum requested finances. Formerly, Army Secretary Brucker and Chief of Staff Taylor had to plead their case directly to Secretary McElroy. A favorable recommendation by the new review procedure will tend to lend it more weight, if for no other reason, by virtue of the fact that it can be assumed "more money for Army" has received a tri-service hearing first. In the same vein, Taylor's concept of a defense breakout by categories of forces is being initiated in a request to DOD from the Mahon committee.

Said one Colonel, "The procedure just might lead to breaking this

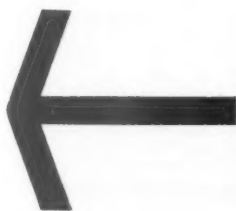


There are 7,500 dots shown here.

This is the number of engineers in the eight divisions of Martin. And 40 percent of these—the 3,000 dots in the circle—are electronics/electrical engineers.

It is this specialized capability that enables Martin to develop electronic systems which anticipate the exacting demands of the missile-space age.

Example: A Martin electronic system known as Master Operations Control (MOC) has been a vital factor in the exceptional performance of TITAN. By automatically checking the hundreds of systems necessary to successful flight, MOC has removed much of the human error from complicated countdown procedures.



MARTIN

The eight divisions of The Martin Company are Activation, Baltimore, Cocoa, Denver, Nuclear, Orlando, RIAS, and Space Flight.

of Staff matters. The Deputy Chief of Staff for Military Operations is the Army Operations Deputy for the Joint Chiefs of Staff.

He has Army staff responsibility for: All matters relating to strategy, tactics, military organization, training and combat developments within the Army establishment, and the formulation of policy related thereto; over-all staff supervision and coordination of functions of the Army relating to Army Aviation and formulation of related policy; over-all staff responsibility for mobilization as authorized; and determination of operational and training requirements for Army facilities, worldwide. He has principal Army staff responsibility for nuclear weapons, guided missiles, satellites and space activities, unconventional warfare, psychological operations, special plans, and chemical, biological, and radiological weapons. He exercises direct supervision and control of the following to include their organization and functions: The Chief of Civil Affairs, the Chief of Military History, and the Superintendent, United States Military Academy.

His major budgetary responsibilities lie in the development of plans upon which all Army requirements are ultimately based. These requirements are reflected in all budgetary programs.

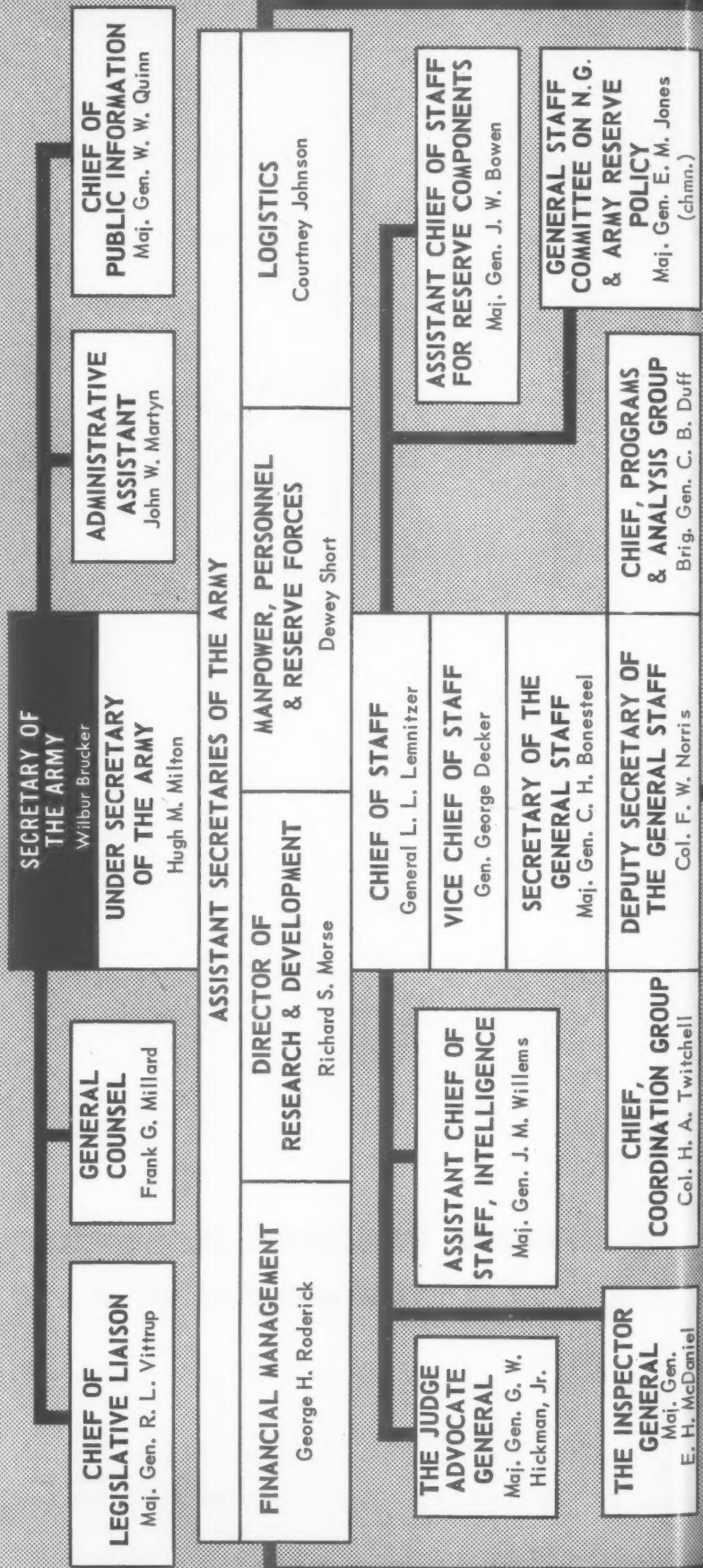
Extensive parallel inter-service relationships are required in performance of the above, with particular reference to his responsibilities as Army Operations Deputy for the Joint Chiefs of Staff.

Relationships with civilian agencies are equally high-level. He is responsible to the Chief of Staff for reviewing, coordinating and recommending the Army position on Operations Coordinating Board and National Security Council matters; maintains liaison with the Department of State and the Atomic Energy Commission; coordinates with all civilian agencies in connection with civil defense and disaster relief; and maintains contact with civilian educational and aviation training institutions.

In the international field, he formulates U.S. Army politico-military policy and Army staff recommendations on military assistance programs; establishes the U.S. Army position on matters arising from U.S. participation in the United Nations; provides membership in NATO committees; and on international boards and commissions; and provides and coordinates DA assistance in the drafting of treaties and other international agreements which have broad, long-range military implications.



DEPARTMENT OF THE ARMY



Maj. Gen.
E. H. McDaniel

COORDINATION GROUP
Col. H. A. Twitchell

Col. F. W. Norris

Brig. Gen. C. B. Duff

(chmn.)

**COMPTROLLER
OF THE ARMY**

Lt. Gen. William S. Lawton

**CHIEF OF RESEARCH
& DEVELOPMENT**

Lt. Gen. A. G. Trudeau

**DEPUTY CHIEF OF
STAFF FOR LOGISTICS**

Maj. Gen. R. W. Colglazier

**DEPUTY CHIEF OF STAFF
FOR MILITARY OPERATIONS**

Lt. Gen. J. C. Oakes

**DEPUTY CHIEF OF STAFF
FOR PERSONNEL**

Lt. Gen. J. F. Collins

CHIEF OF MILITARY HISTORY

Brig. Gen. J. A. Norell

**CHIEF OF
NATIONAL GUARD BUREAU**

Maj. Gen. D. W. McGowen

CHIEF OF CIVIL AFFAIRS

Maj. Gen. A. D. Mead

**CHIEF OF ARMY RESERVE
& ROTC AFFAIRS**

Maj. Gen. F. M. Warren

THE ADJUTANT GENERAL

Maj. Gen. R. V. Lee

CHIEF OF CHAPLAINS

Maj. Gen. Frank A. Tobey

CHIEF OF INFORMATION

Maj. Gen. W. W. Quinn

**THE PROVOST
MARSHAL GENERAL**

Maj. Gen. H. L. Boatner

CHIEF OF FINANCE

Maj. Gen. Paul A. Mayo

**CHIEF OF
ORDNANCE**

Maj. Gen. J. H. Hinrichs

**CHIEF OF
ENGINEERS**

Lt. Gen. E. C. Itschner

**THE SURGEON
GENERAL**

Maj. Gen. L. D. Heaton

**CHIEF
SIGNAL OFFICER**

Maj. Gen. R. T. Nelson

**CHIEF, U.S. ARMY
AUDIT AGENCY**

Maj. Gen. L. R. Dewey

**THE QUARTERMASTER
GENERAL**

Maj. Gen. A. T. McNamara

**CHIEF CHEMICAL
OFFICER**

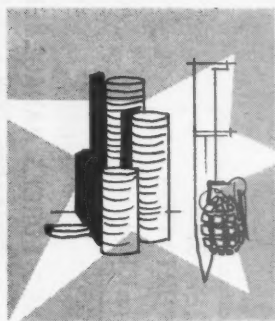
Maj. Gen. M. Stubbs

**CHIEF OF
TRANSPORTATION**

Maj. Gen. Frank S. Besson, Jr.

ARMED FORCES MANAGEMENT

November, 1959



COMPTROLLER

Tight money in the Army has created a tough job for Army's Comptrollers

ANY discussion of Army financial management problems, if held on solid bases, very rapidly becomes inexplicably enmeshed in personnel management, supply management and a host of other items.

The size and scope of the Army task provides some clue to the reasons why. Over-simplified, the Army requirement is to maintain overseas forces in Europe and Asia; run a mobile, combat-ready, strategic command at home; contribute to U. S. defense against air attack; train and assist National Guard and Army Reserve units; and train and support Allied forces throughout the world.

With a \$25-billion inventory, and a personnel strength of from 860- to 870,000 military personnel (with a turnover of about 200,000 per year), 360,000 civilian employees and 40,000 indigenous employees, "the spectrum of our operations is broad—almost unbelievably so," to quote Army Comptroller Lawton.

From keeping five divisions standing ready in Europe to maintaining a military mission in Viet Nam, to governing the far flung territory of Okinawa, from conducting ceremonial funerals at Arlington Cemetery to training the pentathlon team for the next Olympics, the activities range from major to minor.

And all this costs money.

To quote Lawton again, "The Army is responsible to the President, its Commander-in-Chief for the judicious use of its money. As his agent, the Bureau of the Budget, exercises close supervision over our financial operations. Concurrently, we are responsible to the Congress; and both Congress and its agent, the General Accounting Office, keep a wary eye on us. Any plan of financial operations we may wish to pursue must have approval of all these authorities. In addition, of course, the Department of Defense exercises an even closer control over our financial systems and, in fact, over

the expenditures themselves." He adds that the increasing complexity of defense operations and, in the past 20 years, the enormity of defense expenditures have brought about the multitude of reviews by supervising agencies. "In these reviews, the Army must justify, in quite some detail, the purposes for which we plan to spend almost ten billion dollars—the amount the Congress has authorized each year for the past few years. Not only our purposes but our methods of control are considered in these reviews."

What functions fall within the area of the comptroller? There are half a dozen principal ones: budgeting, accounting, review and analysis, management analysis, auditing, and the physical problem of finance—paying the Army's bills. There are certain others, but these six are the principle ones.

Borrowing liberally from the statements of General Lawton, the list breaks down this way:

Budget—the mechanics of collating the data, justification, review and all the other steps involving in assembling a meaningful budget require a great deal of effort. Army budgeting today is detailed in terms of missions (oper-

ating posts, training, etc.), receives more close attention from Army top management, from the Army Secretary on down, than it ever has before.

Major recent development in the budgeting business has been a shift from obligational toward a cost basis. This change is now required by law and, although Army thinks it is a change for better, it has at the same time created a headache. Although internal budget development is presented to the DOD and the BOB in terms of cost, Congress still demands their data in terms of obligations.

Says Lawton, "We are using cost data in our management processes but until we can go through the entire cycle of internal preparation and external presentation in terms of cost, we will not get the full benefits of the change."

Accounting—until five or six years ago, Army's accounting systems "had just growed." Operating some thirty or so different systems covering diverse activities, Army decided it was time to overhaul these and bring them into one cohesive system. It was a major overhaul exercise, started in 1953 and completed last year. Barely pausing to rest, the accountants have launched into other areas, looking for economy and efficiency in their operation. Examples: putting data on electronic equipment, application of whole-dollar accounting, trying to find some practical method of reducing the paperwork involved in a myriad of small-valued requisitions.

In other related areas, innovation of the stock and industrial fund procedures have brought advantages—such as better, tighter control over supply utilization, increased "consumer" awareness of the true cost of his operations, and most important, better information for management.

Review and Analysis—as background to any discussion of R & A, it should be noted that management is a relatively new term in the Army,

—The People—

Assistant Secretary for Financial Management

G. H. Roderick

Deputy Assistant: E. A. Bacon

Executive: Colonel S. K. Eisminger

The Comptroller of the Army

Lt. Gen. W. S. Lawton

Deputy Comp.: L. W. Hoelscher

Assistant Comp.: Brig. Gen. R. N. Tyson

Executive: Colonel P. B. Watson

Director of Accounting: Colonel A. E. R.

Howarth

Director of Army Budget: Maj. Gen. D.

W. Traub

Director, Contract Financing: C. Howard

Knapp

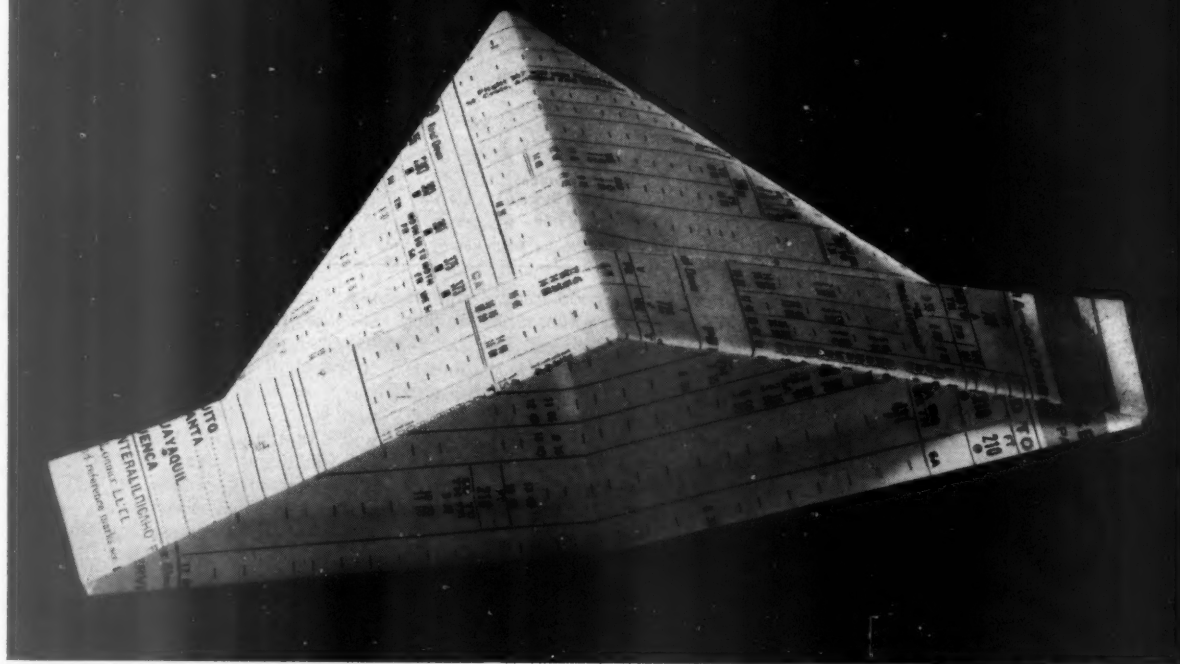
Director, Management Analysis: Maj. Gen.

R. W. Ward

Director, Progress and Statistical Report-

ing: Colonel C. Kouns

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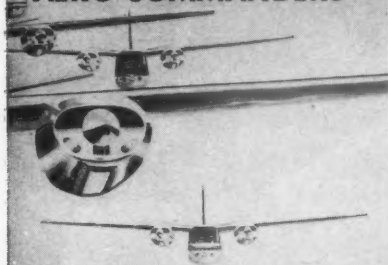


* Trade Mark, Reg. U.S. Pat. Off.

NOVEMBER 1959

800

AERO COMMANDERS



mean business

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MILITARY RELATIONS DEPARTMENT

AERO COMMANDER

AERO DESIGN & ENGINEERING CO
BETHANY, OKLAHOMA



THE ARMY BUDGET

New Obligational Authority--FY 1960 (Thousands of Dollars)

	FY 1960 Appns.	FY 1960 Appns.
Military Personnel		
Military Personnel, Army	3,233,063 ¹	
Reserve Personnel, Army	231,700	
National Guard Personnel, Army	234,961	
Operational and Maintenance		
Operation and Maintenance, Army	3,075,390	
Operation and Maintenance, Army National Guard	151,700	
Operation and Maintenance, Alaska Communication System	5,676	
Promotion of Rifle Practice	300	
Procurement		
Procurement of Equipment and Missiles, Army		1,407,300
Research Development Test and Evaluation		1,035,715
Military Construction		
Military Construction, Army		263,632
Military Construction, Army Reserve		20,000
Military Construction, Army National Guard		23,219
Total		9,682,656

¹ In addition \$281-million to be transferred from the Army Stock Fund.

has prompted a good many clashes in concept and philosophy among Army commanding officers. But though they may fight the term (and there is becoming less and less of this through more and more exposure to understanding), they do, in effect, practice management. The only danger in exercising the term, comparing Army management responsibilities with industry, is in not recognizing that the comparison can't be done. A CO has a job much broader than industry. (For example, the commanding officer running a fair-sized city like Fort Benning, Ga. is responsible for schooling, morale, safety, and a host of other things which go well beyond strictly business operations into civic and political affairs.

Says one, "Every head of an agency, from the post commander to the Army area commander to the Army Secretary, periodically looks at his program to see how far he has progressed, how much is left to be done, and what, if any, changes should be made.

"It is the job of the comptroller to present that review. He endeavors to show the commander in meaningful terms how programs of the command stand in relation to each other, that is, whether they are in balance, on schedule and where the trouble spots loom."

Management Analysis—in certain respects like Program Review and Analysis, Management Analysis goes farther, is one function of specialized assistance to the commander. Assistance takes the form of management surveys, organizational analysis, management engineering, advice on such new techniques as the use of computers, and any other aids which may be of assistance to installation commanders. Hottest item in the DA Management Analysis operation right now at the Pentagon level, is an idea being tested at Fort Meade to use computers to perform many paper-

work operations at Class I installations—something of a size and scope that has never been tried by anyone before. In effect, it amounts to an attempt to integrate several functional areas into one so that one piece of input data will automatically trigger actions in all functional areas affected. Immediate pay dirt, of course, will be in the supply area. About two years into the machine programming effort, the supply portion will take about one more year to start showing real results. One side benefit: to begin programming at all, Army had to do an analysis of all paperwork operations on a post, determine how many were related, how many were parallel.

Auditing—primarily through the Army Auditing Agency, Army field units have available a comprehensive auditing service, handled primarily by means of contract and installation type audits. Audit operation seeks to emphasize "service to commands." Says Lawton, "This is not an easy idea to sell. But we did convince people in the field that an Army audit agency inspection, like a visit to the dentist, is good preventive medicine. More than that, our commanders now recognize that audit findings can be of great assistance in improving management."

Paying the Bills—not an immediate responsibility of Lawton's office, the job is handled under his supervision by the Office of the Chief of Finance. Problem is not one of meeting the payroll but of staying within the appropriation. In summation, Lawton's job amounts really to a constant attempt to improve the techniques of management within the Army—not only at the top level but wherever there is a khaki uniform. Says Lawton, "The Army attempt to attain the best management is one to which I and other Army comptrollers are dedicated, but it is also one in which every member of the Army participates."

ARMED FORCES MANAGEMENT



800

AERO COMMANDERS



MEAN BUSINESS



RESEARCH AND DEVELOPMENT

*The measure of the work here is that
Army can't afford to buy all it wants*

PROBABLY no other activity in the Army today places greater importance on the application of sound management principles and procedures. Said one officer, "In a large measure the success of the Army R&D effort depends on how well it is planned, directed and controlled."

Ideally, developing new hardware should be run by giving a man the responsibility, the money and facilities he wants, and turning him loose. But Army material development cannot work quite that simply. There are too many checks and balances, established both by law and higher authority, which Army must follow.

Says Richard Morse, "It is a big technical management job. One of the things we have to do is get more experienced technical executives in-house. In spite of all the debate about the dearth of scientists and engineers, our biggest weakness is really a definite lack of technical management talent."

"Furthermore, there is a lack of appreciation for the fact that any one office has only a limited management capability." In the last few years, Army R&D has been undergoing a change in the way it does things—primarily because of the change in Secretary of Defense authority.

Coupled with a thin allotment of resources, the result has been a heated emphasis on improving "the way things work." A good many of the problems are an offshoot of leadtime—R&D Chief Trudeau's pet project. The number of man hours that have been devoted to chopping away at the time required to move from concept to operational hardware has been amazing.

Particularly pleasing to Trudeau has been the hard work devoted to the problem by the technical services "for," he says, "the problem is a local one. It cannot be solved with a wave of the hand at topside—but like all long range projects, immediate results are not readily obvious." Army is making progress because the whole Army is saturated with the conviction that this is important, that small economies across-the-board will accumulate.

Among the notable attempts at an answer: the setting up of review points during development (example: a conference or review at design release date) at which user, developer and top R&D people will meet. The idea: definite check points will result in better more timely decisions.

Says Morse, "We are placing more and more premium on making earlier decisions on big problems. We've got to examine our projects and stop, not just slow down, non-profitable ones. We have to do earlier technical appraisal of development programs and look at projects in terms of their ultimate importance to the Army—and not in terms of their publicity value, ability to utilize facilities, or current popular appeal."

Says Morse, "The Army has important things to do in space but it can't afford to do all the work itself. I am more concerned personally with the defense of the free nations of Europe than in devoting management effort of the Army to the interesting but time-consuming problems associated with sending an expedition to the moon."

Thus the Army wants to do more work in the bacteriological and chemi-

cal warfare, and in the development of an improved field army, particularly for limited war use—not only building deliverable munitions to troops but also in educating the public to just what this relatively neglected field amounts to.

Within the Army's Pentagon R&D hierarchy, Trudeau reports formally to the Chief of Staff, Morse to the Secretary of Army. In practice, however, they discuss their plans and problems a good deal beforehand, thus move pretty much in the same direction. "Without the fine personal relationship I have with Trudeau," says Morse, "this job would be hopeless."

Morse maintains a small staff, relies on Trudeau for most of his staff-derived information, returns the favor by having access to lines of communication probably not available so readily through military channels, such as the Director of Defense Research and Engineering, the President's Science Advisory Board, sister-service Assistant Secretaries for R&D. (one example: Morse has installed a direct-line switchboard system to the other service Assistant Secretaries for R&D, one more step in building a close tri-service informal basis for working together.)

The Director of Research and Development for the Army has complete responsibility, scientific and administrative, for the research and development function, dealing directly with the Director of Defense Research and Engineering and his assistants and deputies.

Specifically, he approves the initiation of or changes in policies, plans, programs and regulations for the overall Army R&D program; handles principal liaison with other defense agencies in the submission of Army programs; and directs the investigation, analysis and evaluation the programs through the Chief of Research and Development and the Directors of Research and Development in the technical services.

In the office next door the Chief of Research and Development is re-

The People

Director of Research and Development
Richard S. Morse

Deputy: Dr. E. G. Witting
Special Assistant to the Director: Dr. J. Schwab

Executive: Colonel W. A. Edens
Chief of Research and Development
Lt. Gen. A. C. Trudeau

Deputy Chief: Maj. Gen. R. J. Wood
Chief Scientist Advisor (Consultant): Dr. H. C. Weber

Executive: Colonel R. P. Carlson
Chief/Plans Division: Colonel G. W. Dickerson

Chief/Programs and Budget: Colonel R. V. Porter

Technical Liaison Office: Colonel J. E. Shirley

Director/Developments: Brig. Gen. F. H. Britton

Director/Army Research: Brig. Gen. W. J. Ely

Director/Special Weapons: Maj. Gen. W. W. Dick, Jr.

sponsible to the Chief of Staff for planning, coordinating, and directing and supervising all Army R&D. This responsibility covers a wide spectrum and means close, continuous coordination with all Army staff elements. He provides technical advice and information on the future state-of-the-art to DCS/Ops who has staff responsibility for future Army organization, tactical doctrine and war plans.

Although the CRD deals directly with the technical services on R&D matters, he coordinate with the Deputy Chief of Staff for Logistics before issuing any directives which affect logistics, since DCS/Log controls and commands the tech services.

Within Trudeau's office itself there are three directorates and two separate divisions. A partial description of their jobs might include:

Special Weapons: supervises Army's efforts in the special weapons program and supervises and directs the activities of the atomic, the missiles and space, and the air defense divisions. Exercises general staff supervision over the development portion of the Army R&D programs in the fields of guided missiles, space vehicles, conventional anti-aircraft artillery material, anti-aircraft fire directional systems, target drones and large caliber free rockets. Within his field of interest, exercises general staff supervision of engineering and user tests.

Also handles supervision over the development portion of the Army R&D program in the atomic field, including atomic weapons material and nuclear reactors (until development has reached the point when a reactor is to be applied to a specific

use), coordinates requirements for development and modification of atomic weapons systems, nuclear reactors and radiological defense material. Supervises and coordinates, through the Army Ballistic Missiles Committee, development of various high priority projects to assure the earliest practicable completion of these programs.

Army Research: supervises the Army's efforts in the research program and supervises and directs the activities of the Army research office, which is comprised of the Operations Research Division, Human Factors Research Division, Research Support Division, Life Sciences Division, Physical Sciences Division, and Environmental Sciences Division.

Plans and directs the research program of the Army to insure maximum utilization of the available scientific talent, insures a dynamic program responsible to the future requirements of the Army; fosters within the laboratories and arsenals of the Army the best possible atmosphere for the prosecution of research; provides the civilian scientific community with a point of contact for entry into the Army research community; and encourages and promotes scientific training and education and furthers scientific activity in areas of possible interest to the Army.

Establishes policy, plans and programs guidance for the research portion of the Army R&D program and the medical equipment development portion of the development program. Develops and justifies the Army research budget. Reviews and coordinates scientific research activities of the technical services with other de-

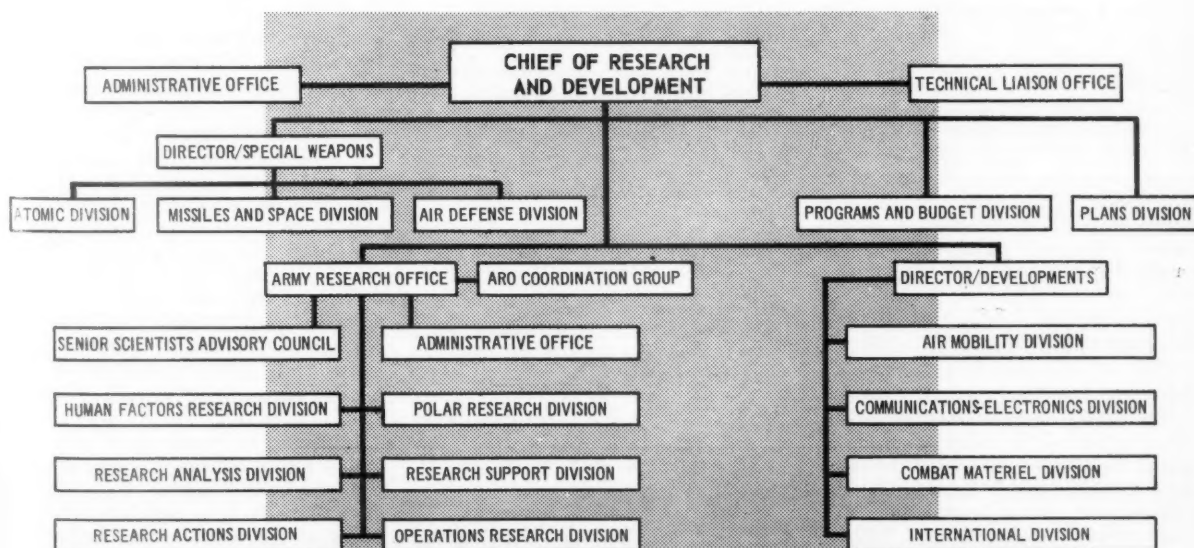
partments and agencies.

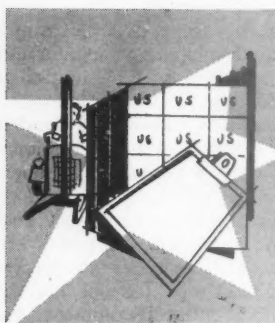
Developments: supervises the Army's efforts in the development program and supervises and directs the activities of the Air Mobility Division, Communications-Electronics Division, Combat Materiel Division, and International Division. Exercises general staff supervision over the development portions of the Army R&D program that deal with Army aviation, aerial delivery equipment, and material developed by the Signal Corps (except fire direction and control equipment for missiles); within its field of interest, exercises general staff supervision of engineering and user tests and supervises the environmental test programs of the technical services.

Exercises general staff supervision over the development portions of the R&D program of the Ordnance Corps (except AAA, guided missiles and atomic munitions), Chemical Corps, Corps of Engineers (except atomic reactors), Transportation Corps, and the Quartermaster Corps. Exercises general staff supervision of the Army portion of the Mutual Weapons Development Program.

Plans Division: is responsible for preparing Army R&D Plans and Planning Guidance and coordinating requirements for, and utilization of, foreign intelligence applicable to R&D.

Programs and Budget Division: responsible for Army R&D policy, programming and management. Prepares and publishes Army R&D policy and program guidance, monitors review and analysis of the Army R&D program, and is responsible for budgeting and financial planning and control of the Army R&D program.





LOGISTICS

Handling a world-wide operation must be faced and solved

PINCHED as hard as, if not harder than, either of its sister Services, Army, on something far more essential than just general principles, has been forced in recent years to place great emphasis on effective management of funds and resources. And if this is true of the Army generally, it is absolutely true within the Office of the Deputy Chief of Staff for Logistics.

This year, for example, the Deputy Chief of Staff for Logistics is responsible for approximately 60% of the Army budget—or something in the neighborhood of \$5.2 billion. Efficient procurement of supplies, support and maintenance (as well as certain stock fund, industrial fund, and military assistance buying) would be tough enough if it were only a matter of replacing the same equipment year after year.

But like the switchman in a metropolitan railway switchyard, DCSLOG must monitor the phasing in of a whole host of new equipment, phasing out of the old. Thus, there will almost always be in the system an item which is new, which is in production, which is being improved in production, and, at the same time an item which is proven, which has been distributed throughout the Service, which isn't as good as the new item but is still a serviceable, proven piece of gear. At the same time there will be obsolescent material being phased out of the system. Thus, when to do how much with what becomes a monumental managerial headache. How to handle big programs and big budgets (there are over 2,000 big money items alone in the DCSLOG inventory) is a never completely answered question.

Two of the Army's primary programs are logistics programs managed in DCSLOG: Installations and Material. Broken down further, material covers three major categories: principal items (such as tanks) financed by the Procurement of Equipment and Missiles, Army Appropriation (PEMA) funds; a category which, for general discussion purposes, may be called

spare parts financed by Operation and Maintenance funds; and all secondary items and repair parts (clothing, food, POL, general supplies required for

day-to-day operations) financed by stock funds. (There are approximately 668,000 cataloged items in the stock fund—\$2 billion was authorized by the Bureau of the Budget this year). The principal items are managed as a direct reflection of tactical forces, requirements.

More background: The logistics portion (\$2.234 billion) of the Operation and Maintenance appropriation must blanket some 21 different logistics O&M accounts, such as repairs and utilities; central storage activities. These are only examples. There are literally thousands more.

For example: Logistics must be in constant and complete contact with almost every element of the Army, for any action planned or completed anywhere else is likely to have an effect on logistics. The annual Army Troop Program, for instance, (which comes out of the Office of the Deputy Chief of Staff for Personnel) provides the military personnel spaces, their clothing, and subsistence to support them.

To handle its job, DCSLOG has organized primarily on a functional basis. The reason: it enables a concentration of skills in the several functional areas—maintenance, construction, storage, and supply distribution.

For instance, an Operation and Maintenance Programs Division has been established to draw together the different O&M logistics accounts, relate them to each other, and coordinate them together with the Installations and Material Programs. (When this pulling together within DCSLOG of logistics Operation and Maintenance accounts was done in 1958, it amounted to a major step forward in the DCSLOG organization, according to management experts in DCSLOG.)

Likewise, the stock fund activities within DCSLOG were concentrated in one place. This action has produced stock fund budgets which resulted in praise of the Army for its stock fund management by the Bureau of the Budget and Congress where before

—The People—

Assistant Secretary for Logistics:

Courtney Johnson

Executive: Colonel C. L. Redman, Jr.

Army Contract Adjustment Board: Captain Cecil T. Lakes

Army Member/ASPR Committee: Lt. Col. W. W. Thybony

Deputy Chief of Staff/Logistics:

Lt. Gen. R. W. Colglazier, Jr.

Assistant Deputy: Maj. Gen. G. O. N. Lodoen

Assistant Deputy (Programs and Budget): Maj. Gen. S. L. Myers

Technical Liaison: E. F. Hart

Director, Financial Operations: Brig. Gen. L. G. Van Wagoner

Director, Installations: Maj. Gen. L. E. Seeman

Director, Personnel: Brig. Gen. O. C. Harvey

Director, Plans and Material: Brig. Gen. L. J. Lincoln

Director, Procurement: Brig. Gen. F. J. McMorrow

Director, Supply Operations: Maj. Gen. F. A. Hansen

Chief Chemical Officer

Maj. Gen. Marshall Stubbs

Deputy Chief: Brig. Gen. William E. R. Sullivan

Deputy Chief for Scientific Activities and Chief Scientist: Dr. P. K. Frolich

Chief of Engineers

Lt. Gen. E. C. Itschner

Deputy Chief for Construction: Maj. Gen. W. K. Wilson, Jr.

Deputy Chief for Military Operations: Brig. Gen. S. R. Hanmer

Chief of Ordnance

Lt. Gen. J. H. Hinrichs

Deputy Chief: Maj. Gen. August Schomburg

The Quartermaster General

Maj. Gen. A. T. McNamara

Deputy: Maj. Gen. R. T. Evans, Jr.

Chief Signal Officer

Maj. Gen. R. T. Nelson

Deputy: (Acting) Brig. Gen. E. F. Cooke

The Surgeon General

Lt. Gen. L. D. Heaton

Deputy: Maj. Gen. T. J. Hartford

Chief of Transportation

Maj. Gen. Frank S. Besson, Jr.

Deputy: Maj. Gen. R. B. Lincoln, Jr.

Deputy for Aviation: Brig. Gen. R. D. Meyer

there had been a heavy share of criticism.

Other examples of functional concentration: a Personnel Directorate must give the logistic view on personnel and manpower plans. A Plans and Material Directorate must render opinions on whether their tactical and strategic plans can be logistically supported. A Plans Division, under the Director of Plans and Material, sees to it that the Technical Services have adequate logistics units to support the Army in the field, and that logistics considerations make their proper impact on war plans.

The Mutual Security Division, under the Directorate of Supply Operations, must delineate foreign military and material problems, see that the MSA program is developed and handled wisely—with the added headache of seeing that Army itself is reimbursed for equipment it buys from its own budget to send to other nations.

Industrial Funds: The only ones (28 of them) the Army has are logistical. Their budgeting is reviewed by one agency within DCSLOG.

Although it is not their primary responsibility, DCSLOG must also watch closely the Research and Development Program. Progress in development may require logistics planning to be ready to buy for inventory when newly developed equipment is

ready to move into production.

The organization is set up functionally, rather than on a commodity basis, because DCSLOG feels provides great management strength, but there are problems: their working operation has to be geared to programs and budgeting. What happens when they must handle an across-the-board commodity such as Nike Hercules? The answer has been several things.

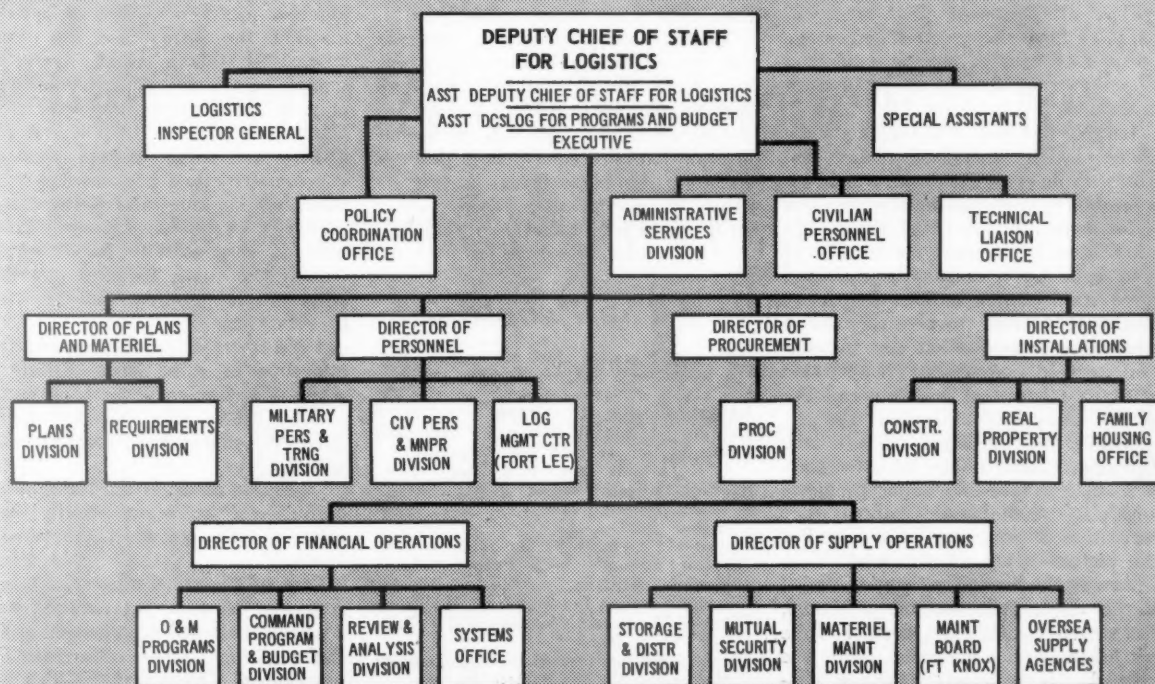
For one, an Assistant DCSLOG for Programs and Budget has the primary job of harnessing together the various programs, seeing that they dovetail on any one commodity. But there are even more things which DCSLOG feels it must do to enjoy a functional organization and still cope with the problems incident thereto.

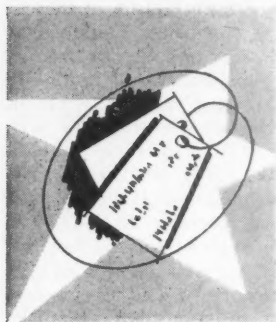
Among them: bi-weekly top "Board of Directors" meetings; the appointment from time to time, of certain agencies, as special project monitors; a strong, tough centralized paper control; a once-a-year "top boss" personal program guidance (over and above the Army-wide program guidance documents); morning cable reviews, paper resumes to the DCSLOG, monthly DCSLOG review and analysis meetings—all to insure plenty of inter- and intra-office coordination and communication, to assure exposing the top people in each functional area to what is going on in the others.

The DCSLOG is, in essence, top

boss in the Army's logistic operation. He has what one officer described as "operational control plus or just a shade short of command" authority over the Technical Services. Only in the Research and Development area do the Technical Services respond elsewhere (to the Chief of Research and Development) and even then they must coordinate with logistics. DCSLOG not only has been given this control but has also been given control of the money and manpower and other necessary powers and procedures to make this control viable.

The result of heated arguments and "a good many bloody noses" at the turn of the century (when the General Staff system was introduced) and a gradual evolution since, this setup now provides the DCSLOG with a centralized authority frequently not recognized by people outside the logistics kingdom. It is probably the most cleanly cut example of where, in Army's trend of the last ten years to decentralization, the authority has come to rest in what was once solely the Army Chief of Staff's backbreaking responsibility. As long as intensive proper attention is paid to the key requirement for coordination, the heavy functional emphasis permitted by today's DCSLOG organization will allow it to remain one of the primary reasons Army does as well as it does with a threadbare pocketbook.





PERSONNEL

The goals are strong forces, and good utilization. The Problems are many

THE Deputy Chief of Staff for Personnel is assigned responsibility for over-all personnel policy for all components of the Department of the Army.

In general, all matters pertaining to the management or utilization of individuals will be handled by the Director of Military Personnel Management or the Director of Civilian Personnel respectively for military and civilian personnel, and all matters pertaining to manpower requirements, authorizations and other numerical factors will be handled by the Director of Manpower Management.

Reserve component matters are taken care of within the functional activities of each division in coordination with promotions and retention division.

Army personnel planning, progress and problems (and there are considerable of all three) begin first with the numbers, or the force level. Ultimate goal of all personnel effort is, essentially, to have the greatest percentage possible of men in combat units and to achieve perfection in manpower utilization.

Largely because of fostering a basic philosophy of centralized policy control, with de-centralized operational responsibility, Army personnel people can claim more progress than problem accumulation in manpower management—in spite of a constantly shrinking force level. Chief reasons for Army personnel success revolve around a continuing emphasis on the installation or field commander being made constantly aware of his responsibility in the manpower utilization area.

Army's top personnel office in the Pentagon claims, unlike its sister services, that it faces no major problems which it cannot handle without more legislative or pecuniary assistance. But the picture is not all sunshine.

Among the headaches: money, which has a direct reflection on personnel, has stayed virtually the same, in spite of inflationary tendencies. Said one colonel, "If we can't improve elsewhere, the shortage may come out of personnel." The picture is complicated

by the unceasing requirement to fit personnel to the change in weaponry—retraining, reclassification, etc. Said one top personnel officer, "It is strictly a parochial view, of course, but one of our big headaches is caused by this constant fiddling around the machinery of war."

In addition, there is, of course, the perennial morale problem. "We have defeated all our grandiose plans unless we remember that we are dealing with human beings."

Trying to isolate problems in the Army personnel area is something like pulling one loose string on a sweater, having the whole garment unravel.

For example, retention and promotion of junior officers is one of Army personnel's key attention areas. Currently managing to retain one fourth of the obligated tour officers, Army wants to boost that to about 50%—to give them a quality choice for the approximate 35% they intend to hold on to.

Yet, in analyzing how to manage this, Army Personnel soon finds itself in a discussion of quarters (Army can provide only about 59% of its housing needs), promotion (although personnel insists it has been able to work through its hump problem without hurting its officer promotion plan, there are a good many rumblings from the field over promotion opportunities).

The People

Assistant Secretary for Manpower, Personnel and Reserve Forces

Dewey Short

Deputy Assistant: F. L. Orth

Executive: Colonel Robert F. Alexander

Deputy Chief of Staff for Personnel

Lt. Gen. James F. Collins

Special Assistant: Major R. C. Hixon

Assistant Deputy: Maj. Gen. J. L. Richardson

Executive: Colonel S. R. Johnson

Director/Women's Army Corps: Colonel Mary L. Milligan

Director/Civilian Personnel: R. H. Willey

Director/Manpower Management: Brig. Gen. V. H. Bond

Director/Military Personnel Management: Maj. Gen. R. W. Porter, Jr.

Director of Programs: Brig. Gen. T. R. Stoughton

To attract and hold both officer and enlisted personnel beyond their obligated tour, Army is trying several things. Among them: pointing out traditional schooling opportunities; putting an emphasis on personalized personnel management, (the job of getting the men closer to the Army is being pushed from the top level down to the unit commander); "continuing work on this housing thing"; a program of temporary promotions.

In the theoretical beginning, Army gets its force level numbers from the Assistant Secretary of Defense for Manpower, Personnel and Reserve Forces (for officers, NCO's, and civilian strength—in the military assistance advisory groups, International Security Affairs hands out the list).

Personnel takes the DOD number, develops the Army troop program—which amounts to developing personnel requirements, translating DOD numbers into a time span by quarters for both the current and the coming year. With this in hand, Army personnel launches into a whole series of managerial techniques, such as the DOD Management Manpower Report, a Personnel ledger system, quarterly vouchers (strictly a bookkeeping operation), whose sum and substance is, primarily, to provide the men with the ultimate responsibility for doing the Army's tasks with a decent picture of what people resources they are likely to get.

Field commanders either accept their allocation or come back pushing for more. Whether they are high on the priority list (Europe, STRAC) or low (CONAS) determines how successful they are.

Personnel analyzes the training base output on the same priority basis, works out the personnel allocations in numbers.

One of personnel's big problems is reducing the time lag between when a person is needed at some spot around the world and when he arrives. Said one colonel, "People not in this business frequently don't realize what this leadtime amounts to—it takes nine

ARMED FORCES MANAGEMENT

months to react unless there is an emergency." Army tries to give individuals ninety days minimum notification on a move, and does pretty well. They are trying to reach six months. (Most individuals get four or five months notice of a change-of-duty station.)

Not that Army couldn't shuffle people much faster in a real emergency, but for what are primarily human relations reasons, they don't want to. Ultimate goal of the program is much simpler, smoother planning. One by-product: because requisitions come from overseas seven months ahead of time and the sheer book-keeping takes a month, Army overseas commanders must look well down the road in planning and predicting their workload—particularly in the support activities.

In contrast to combat units, these support activities can't establish a firm table of organization because its virtually impossible to predict a workload. Their guide is a combination of past Army experience in various supply and office activities, gives the boss a clue to the number of people he will need.

Said one officer, "We still believe in de-centralization as much as possible, giving the commander leeway to move people around. But we risk wasting a lot of people unless we watch what he

does with techniques like this one."

Other highlights of the Army's manpower business invariably include a look at the manpower utilization survey program—which is functioning primarily in non-combat areas—supporting and training forces.

Surveys are run each year on one third of the activities in major commands to see if commanders have applied yardsticks, controlled personnel, tied it to the workload. Reviews of surveys done by subordinate commands are handled on a 3-year cycle, again to see if the personnel resources are properly used.

Survey teams provide a briefing to the CO and his staff at the headquarters being checked before they start, give him an exit interview and a copy of their report. He is free to make any complaint on the report if he likes but, as of today, substantially less than 1% of the cases result in this.

Personnel people say the Army's manpower utilization around the world has been looked at for so much time now that they are getting to the point where numbers of cuts are getting smaller and smaller—lending strong credence to the Army insistence that further manpower cuts mean ignoring some of their obligations.

"Our biggest problem day-to-day," said a colonel, "is leadtime and manpower utilization. Lately, we are being

faced more and more with simply 'allocating shortages'."

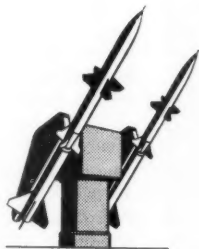
One of Army Personnel's most outstanding successes has been on the civilian side of the ledger. Examples: In the last ten years turnover has been reduced 56%, administrative costs are down 45%. (The turnover improvement alone represents an annual savings of about \$27-million.) Here again, de-centralization is very essential because thinking has to be in terms of mobilization. Administering what amounts to one third of the Army's work force is generally more de-centralized than among the military.

According Army Personnel people, "The basic strength of the Army's system for civilian personnel administration remains in the de-centralized authority for personnel management." New wrinkle in recent years has been a central-authority concern with additional needs, such as developing a reserve of civilian talent to meet long-range key staffing requirements throughout the Army. This means, for one thing, that the broad requirements for the department will shape the broadening opportunities of individual employees. Promotion from within remains a basic consideration of the system but 'within' becomes not just 'within the installation,' but 'within the major commands and Department of the Army'."

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THE NAVY . . .

Many changes, continuing and growing problems face the organization

THE ONE WORD that most clearly characterizes the Navy's organization today is change. There is perhaps no segment of Navy management that has not been affected—directly or indirectly—by the Franke Report on Navy Organization.

If the report itself were not enough, within weeks after it was made, the author—William B. Franke—was named Secretary of the Navy. This put him in the enviable position of being able to follow up his own recommendations. And the sparks began to fly—in fact have flown so furiously that many of the recommendations contained in the report have already been followed, with the remainder in the works.

However, the Franke recommendations will not change the basic philosophies which the Navy has historically followed. Navy will still be run under the two lines of command that have been in use over the years. The Bureau system will still be the backbone of the Navy, and the Chief of Naval Operations will still be in charge of the operating forces. What the Franke recommendations aim to do is to make the older setup more responsive to the needs of the fleet, while at the same

time trying to live within "the iron coat" created by increased costs and a level budget.

The two lines of command that are used in the Navy are unique to that service, and serve to logically separate the operating and support functions—with the support side reporting to Secretary Franke, and the fighting forces answerable to CNO Adm. Arleigh Burke.

On the support side fall the Assistant Secretary's, the Bureaus, Office of Naval Research and Office of Naval Materiel. Under Adm. Burke are the Deputy Chiefs of Naval Operations and the fighting forces.

Oversimplified, the functions to the two lines of command run this way—The requirements for a given piece of gear are drawn up by Chief of Naval Operations, through the Deputy responsible for a particular area—Air for instance. This will be turned over to Bureau of Aeronautics when it has been endorsed by the entire CNO office as being valid and reasonable. BuAer is responsible for delivering the finished piece of gear to the fleet. In doing this it will, in all probability draw on such offices as Office of Naval Material and Office of Naval Research,

aiming at the cheapest fulfillment of the requirement, while at the same time maintaining top quality.

Into this framework is poured the vast quantity of subsidiary decisions needed to get the plane to the fleet. Foremost of these, is, of course, money. Personnel, facilities, logistics, and armaments are only a few of the contributing factors in building a successful piece of hardware, and each of the Navy Bureaus responsible in these areas is likely to have a busy hand in getting the completed product to the fleet.

Overall organization of the Navy is basically functional, following the lines of the decisions that have to be made. Taking the above oversimplified instance as a starting point, it follows that the Navy Bureaus include Personnel, Ships, Ordnance, Aeronautics, Supplies and Accounts, Bureau of Medicine and Surgery and Yards and Docks. Although Ordnance and Aeronautics have been merged into the new Bureau of Naval Weapons, the functional lines still hold, although they are perhaps a bit more streamlined.

Still following functional alignment are the Assistant Secretaries for Per-

ARMED FORCES MANAGEMENT

sonnel and Reserve Forces, Material, Research and Development. Under these fall the Offices of Industrial Relations, Naval Material and Naval Research, respectively. Because of its prime importance to completion of the Navy mission, the Comptroller function has been elevated to the Undersecretary level, with Mr. Bantz wearing both hats. Under him falls the Office of the Comptroller, corresponding to the other offices listed above.

On the other side of the Navy fence is the office of the Chief of Naval Operations, with his Deputies corresponding, where possible, to the support side of the Navy. Again, the alignment is strictly functional. The DCNO's cover areas including Fleet Operations and Readiness, Air, Development, Logistics, Plans & Policy and Personnel and Reserve Forces. Additionally, Adm. Burke has working for him Assistant CNO's for Communications, Intelligence, and Programs & Analysis.

Although there are approved and logical channels of communication from one side of the organization to the other, it is more accurate to say that the crossing from side to side is done on an as needed basis. The CNO organization manual, for instance points out that the DCNO for Personnel and Reserve Forces is the contact point with BuPers; and that DCNO (Logistics) is the touchstone to get to Medicine and Surgery, BuSAND, BuShips, BuYards and Docks and BuWeap. The extreme instance of this is personified in VAdm. H. P. Smith, who serves both as Chief of Naval Personnel and DCNO (Personnel and Reserve Forces).

Opposing this, it can be seen that DCNO Air would be tightly hamstrung if it were unable to communicate with BuWeap, since that office has taken over the functions and duties of Bureau of Aeronautics. It is equally obvious that the new DCNO for Development must work on what amounts to an across-the-board basis with all of the hardware bureaus, besides Office of Naval Research and Office of Naval Material.

Working within this basic framework, and aiming at more functional organization, the Franke report recommendations appear most logical. It is certainly because of this that such a great deal of headway has been made already in implementing the report. And it is also because of this that Congress—when called upon—has been so willing to go along with the necessary legislation.

It is a measure of Congressional cooperation that the bill enabling the merger of BuAer and BuOrd was passed with barely a murmur. So quietly in fact, that many did not

realize it had gone through. Said one top ranking Navy Officer, "We really weren't too surprised here in the Legislative Affairs shop. The ammunition we had was just too compelling to be ignored." As quickly and quietly, Congress has approved RAdm. Paul Stroop to head the new organization.

Snowballing technology is the basic reason for the merger of the two bureaus. With the increased overlapping of aircraft and missile work, the logical move for Navy was to get both jobs done in the same place. With BuAer and BuOrd existing separately, duplication becomes as inevitable as was the occasional case in which a good project fell between the two groups and was overlooked. The results included such organizational beasts as the unwieldy lead-bureau system, and such arbitrary dividing lines as having BuAer handle liquid propelled missiles with the solid-fuelled rockets under BuOrd jurisdiction.

The decision to merge the bureaus was, to this extent, unavoidable. And if critics have said the job of Bureau Chief is too much for one man in this case, it is even more accurate to say that the job is too inter-woven and inter-dependent to be given to more than one man.

The present scorecard reads this way: Legislation has been passed to clear the way, a Bureau Chief has

been appointed, the Bureau as an entity has been set up for two months, and in another two months will have taken over its duties.

This says, in effect, that the bases have been staked down, the diamond has been swept, batting practice is over, and the umpire has said "Play Ball." All of which is necessary to the ball game, but none of which has much to do with who will win.

Unquestionably, the major part of the work in merging the two bureaus into a Bureau of Naval Weapons lies ahead. The study group headed by VAdm. E. W. Clexton, charged with recommending procedures for the merger, is not scheduled to report until April of next year. And even then the work to be done will be slow. The aim will be to work with the administrative offices of the new Bureau first—such functions as the comptroller, the technical liaison offices or the office management staffs.

The final steps in the merger, which will probably take several years to complete, will involve the actual working offices and sections of the two former Bureaus.

If this appears to be a long drawn out process, the reason for it is sheer, uncompromised necessity. Regardless of the form that the organization takes, it must still do the job it is charged with—supplying the fleet with the gear it needs to function effectively in either cold- or hot-war conditions. Loss of momentum would be felt throughout the Navy—and with aircraft and ordnance comprising the guts of the Navy's fighting force, the effect could be crippling.

In another major and related aspect of the Franke recommendations, Navy has re-emphasized and galvanized its research and development efforts on both the operating and support sides of the organization. Changes were—again—dictated by galloping technology. Also, the new alignment will make it much simpler for Navy to work within the new Budget system adopted this year—with Research, Development, Evaluation and Test Funds appropriated in a lump sum, rather than by program, as before.

Also, the new set-up—with specific, high level R&D offices on both sides of the organization—will establish, for the first time, a direct, explicit channel for communication from DCNO/Development to the Bureaus, ONR and/or the Assistant Secretary for Research and Development.

Again, it is a matter of streamlining the existing organization. Besides this, the change makes official something that everybody had been doing all along—maintaining communications between the office of the Chief of Naval



Sailor of the Future . . .

The planes, the missiles and the men will continue to change.

"the iron coat of inflation"

Operations and the support side of the Navy. Also, in setting up the office of the DCNO (Development), Navy managed to consolidate many of the fragmented research and development offices that had been scattered haphazard throughout the CNO's office.

In the Secretary's section of the Navy, the switch to an Assistant Secretary for R&D meant the elimination of one of the existing Secretaries—and the job of the Assistant Secretary for Financial Management was given to Undersecretary of the Navy Fred Bantz. The new R&D Assistant Secretary then took over the office of the Assistant Secretary for Air—leaving the Navy with only three Assistant Secretaries, as prescribed in the 1958 Reorganization Act.

As a result of the re-shuffle, Navy now has Assistant Secretaries for Research, Material and Personnel, with the Comptroller function lodged with the Undersecretary. The alignment neatly follows the three major areas in which Navy must work, with the Undersecretary/Comptroller a logical half-step higher in the chain of command.

In the CNO office, the new research and development office was created largely through up-grading an existing office, the Assistant Chief of Naval Operations. Added to this was the R&D work handled in the Fleet Ops. & Readiness section of CNO. This served to give the office a somewhat greater decision making power, in addition to added prestige. The new office will also serve as a focal point for generating all research requirements in CNO. And once more, it is simply a matter of streamlining and up-dating the existing organization.

The Battle of the Budget

It is the battle of the budget that dictates all actions and planning in the Navy—secondary only to the cold war readiness function which is why the Navy exists. Almost without exception, money is the number one problem mentioned in each office. And if, for instance, anti-submarine warfare is listed number one, the next item usually refers to the money needed for ASW work.

Dictating the above changes as much or more than any other single factor is this general lack of money. The reason for the shortage of funds will be graphically detailed by almost any Navy man at the drop of a hint. Since the Korean conflict, Navy has found itself operating on a fairly level

budget, both in terms of percentage of the total DOD budget, and in terms of dollars.

As anyone who has bought groceries in the past few months knows, prices are following a definite upward trend. Also, Navy is buying more complex and more expensive gear. The result of which is that Navy has found its requirements to be like Alice when she found the cake that said "Eat me." And this with a budget that is just as confining as the room that Alice was in.

Another important aspect of the problem is pointed out by a Captain in the CNO's office: "Without casting any aspersions on the other services, I think it absolutely safe to say that Navy is carrying most of the load in this firefighting from point to point that's called a cold war. We are proud of the job we have done—in Lebanon, the Formosa Straits, or what have you. But everytime somebody says 'Hop to it, here we go again,' it comes right out of our hides.

"In the first place, most of the ships we are using are World War II vintage. This means that they are nearing the end of the road. And if we have to go chasing off to Formosa, it makes it hard to keep the overhaul schedules. Besides this, our present crew allowance is something like 80% of full complement. And so maintenance is occasionally let slip, just out of necessity.

"So we run into all this, and operating costs too. It's no nickel and dime operation to steam an attack carrier force from Hawaii to Formosa. And because of the uncertain nature of this sort of operation, no allowance—or at least a minimum one—is made in the budget for us."

The result of the money squeeze is obvious—fewer weapons systems, a tighter control of all operations across the board, and a desperate attempt to find short-cuts to effectiveness from a money point of view.

One typical example of this is the approach currently being used by DCNO (Air) in its work with future requirements. Most immediately, much thought is being given to the "Missileer" concept—in which a relatively low performance aircraft is coupled with a high-powered air-to-air missile for use in air defense work. The aim is to save on the cost of the airplane, and spend more on the missile, which generally does not cost as much as the plane that carries it.

In another approach to the problem, Navy is looking seriously at the

possibility of regressing a bit—in terms of speed—on the next type of attack aircraft they buy. According to one officer in DCNO (Air), "We are not altogether convinced that you have to be a Mach-buster to succeed in this area. For one thing, the best way to avoid radar detection is to stay down on the deck. At Mach 2, it takes a steady hand to fly that sort of mission. And of course it is a long way from the most efficient way to operate high-performance aircraft such as the A3J-1 Vigilante. Planes like that are made to fly high and fast, where the air is thin. What we have in mind at this point is something in the way of a slower and more efficient plane—it would be trans-sonic, and possibly not even that fast. And of course the real beauty of the thing is that it would not cost as much as the ones we are now buying."

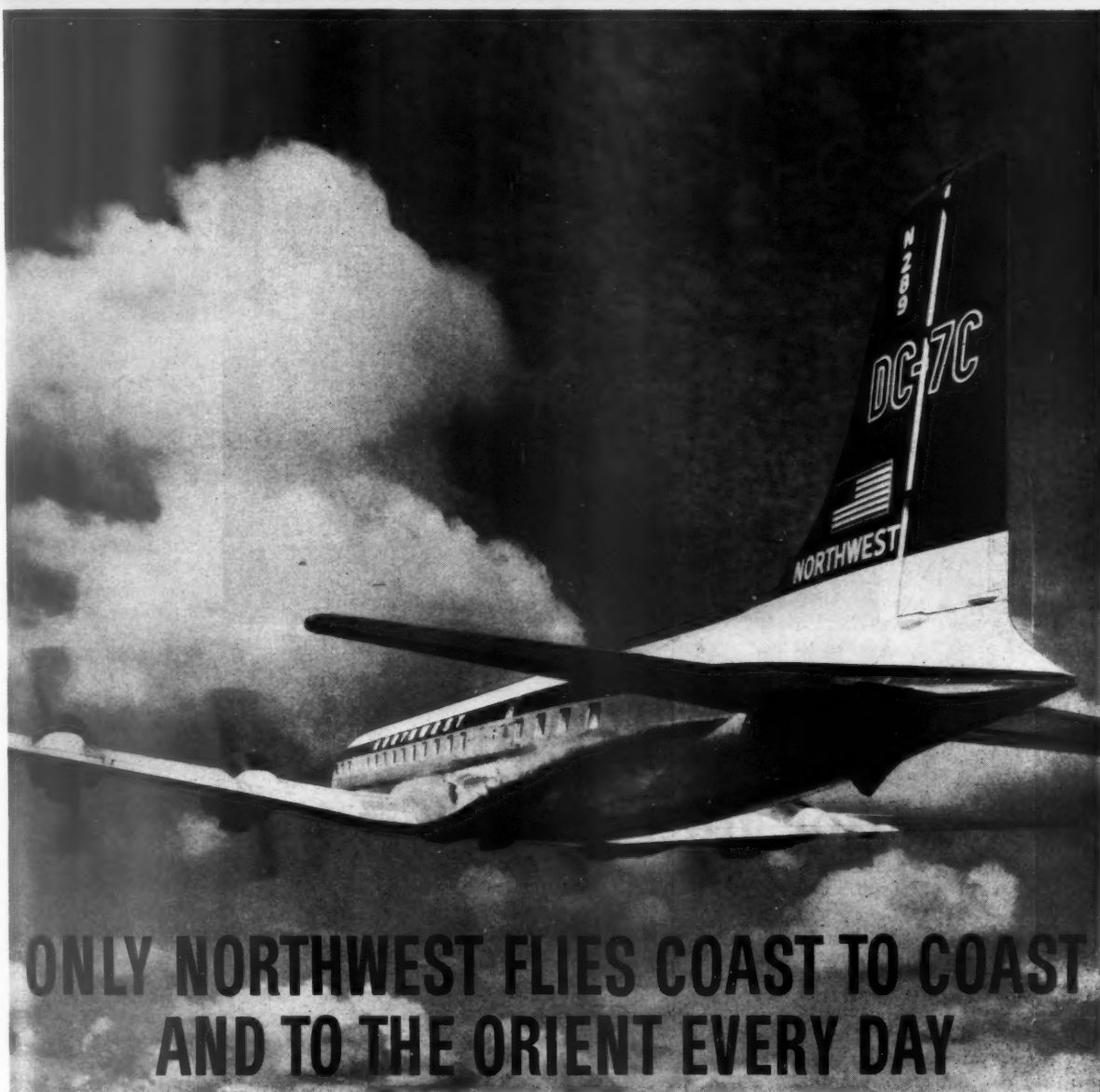
The New Approaches

These are the problems, and a few of the ways in which Navy is meeting them. Because they are continuing problems, the Navy is always on the lookout for new approaches to solutions. One of the most recent approaches, and one of the most interesting from a management standpoint is the method of development being used on the Polaris submarine/missile weapon. In what was generally a departure from past methods, Navy set up a Special Project office to manage this program.

Nominally under BuShips, the Special Projects is, in effect, a separate entity, outside of the normal Navy organization. Because of this, those working on the project have been able to generally cut across the entire Navy support set up, drawing talent where needed to move the program at top priority towards completion. Because of the combination of talents needed for the project, Navy had to draw initially on both BuShips for the missile-sub, and on BuOrd for the missile itself. With the program's magnitude and importance, Navy was forced to throw away tradition, setting up an arrangement in many ways like the Air Force Weapon System Project Offices.

Traditionally, a single Bureau will be in charge of development of a given system, managing as much as possible on the program itself, and drawing on other Bureaus only when needed. With Polaris, the system itself was the starting point, with the Bureaus treated as contributors rather than as leaders. Although the Special Projects office itself is scheduled to go out of business when it is through with Polaris, the merger of BuAer and BuOrd will open the way for more of the same sort of management.

ARMED FORCES MANAGEMENT



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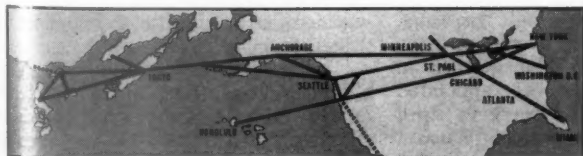
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Navy Secretary William B. Franke . . .

"Not Much Time for Golf"

THERE are few jobs in existence which could place such heavy demands on individual qualifications as that of Secretary of the Navy. Faced with a near impossible budget situation, unique defense responsibilities, and day-to-day control of one of the largest business concerns in the world, the chair in which the Secretary of the Navy sits is a long way from being the most comfortable one in the world. And all of this is compounded by a sweeping reorganization now in progress in the Navy—a reorganization which was unquestionably needed, but one which has to be implemented without the slightest loss of momentum on the Navy's part.

Holding down this job is Secretary of the Navy William Birrell Franke, newest of the Service Secretaries, but one of the old hands in high-level Defense Department management. Tall, lean, slightly stooped and remarkably poised, Secretary Franke presents a commanding figure in a situation where the ability to command is an absolute and unyielding necessity. Holding forth in the big

suite at 4E710, The Pentagon, Secretary Franke commands with authority born of over a decade of defense work, and a successful business career to boot.

Secretary Franke took his first job with the Defense Department in 1948, with the U.S. Army Controllers Civilian Panel. This post he held until 1951, when he was named as a Special Assistant to the Secretary of Defense. Holding this post until 1952, Secretary Franke can prove a job well done with the Distinguished Service Award presented to him by the Defense Secretary. Not that this was the first award that Mr. Franke had earned in DOD—in 1951 he was given the Patriotic Civilian Commendation by the Department of the Army.

Nowhere in his career with DOD has Mr. Franke found the work challenging as in his work with the Navy. Beginning as Assistant Secretary of the Navy for Financial Management in October 1954, he was appointed Undersecretary of the Navy in April of 1957. In his own words, "When I was Undersecretary, Mr. Gates and I

worked pretty much on a partnership basis. Most of the time I knew just about exactly what he was thinking, and a good many of the policies that he set were ones that we had worked out together."

It was only natural when Mr. Gates was named Deputy Defense Secretary, that Mr. Franke was sworn in as Secretary of the Navy on June 8, 1959. "As closely as we had worked before," he comments, "it was a fairly easy transition."

If Secretary Franke was familiar with the problems he was to come up against in his new job, it did little to make them easier to cope with. Facing an inflationary budget situation and recurring requirements for more and better weapons systems, he has found that his long and successful civilian career in accounting and financial management is a valuable foundation on which to build.

The problem is basically this: Traditionally, budgeting in the military was a fairly cut and dried process. Navy decided it wanted an aircraft carrier, found how how much carriers

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cost, and bought one—allowing enough lead time to have the vessel built.

This is no longer the case. In spite of the reduced lead times, the rapid inflationary tendencies in the national economy have put Navy in a position where it is nearly impossible to get accurate prices on any major piece of equipment. Practically by the time the estimate is made, the prices tend to be inaccurate, and by the time the three- or four-year project is finally rolling off the production lines, it may be costing the Navy nearly half again as much per carrier as was originally anticipated.

"Nothing can be regarded as permanent in the pricing area," comments Mr. Franke, "We're dealing with an almost entirely fluid situation, and it's forced us to change our concepts in budgeting. . . ."

At the present time, Navy is fighting through its most sweeping reorganization in recent years, a reorganization based on a report submitted by then-Undersecretary Franke, as head of a top-level Navy study group. At the time, says Mr. Franke, "I had no idea in the world that I was going to find myself in this position when I completed the report. As a matter of fact, I had regarded the report as a sort of swan song, ending my work in the Navy. At the time, I had quite frankly intended to retire at about the same time I submitted the report."

It is a measure of the Secretary's thoroughness and good work on the report that those portions needing Congressional approval have been passed with scarcely a murmur from the usually vociferous politicians, and that many of the major parts of the recommendations are already in effect and working well.

"The report that we made," says Franke, "was the sort of thing that is occasionally necessary in any organization of this size. You can't say flatly that it's needed every five years, but it is something that should be handled with some imagination from time to time."

For the time being, Secretary Franke feels that the Navy is in pretty good shape: "On the Bureau mergers, for instance, I doubt if we'll go much farther. There was some argument for a Service Bureau, but as has been said before, it would only move the service bureaus to division status in a larger organization. They just can't logically be merged. Neither do I think that BuShips is too likely to be included in BuWeap. It would simply be too big, and I don't really feel that there would be justification for it. On the other hand, BuWeap certainly isn't too large to manage. Actually, if you



Discussion with all segments of the Navy is time consuming and takes continuing work.

don't count the Naval Air Stations included in BuWeap, it turns out to be about the same size as BuShips."

With money as one of the major problems facing Navy at the present time, it is logical that Secretary Franke's civilian background should be largely in accounting and financial management. From even before the time that he graduated from Pace Institute of Accounting in New York, his civilian career was devoted to such top-level accounting firms as Cluett, Peabody and Co., Naramore, Niles and Co. and Franke, Hannon and Withey of New York, in which he was senior partner. Indicating the regard in which he was held in these areas are the honorary degrees he holds—Doctor of Science from University of Louisville, and Doctor of Laws from Pace Institute.

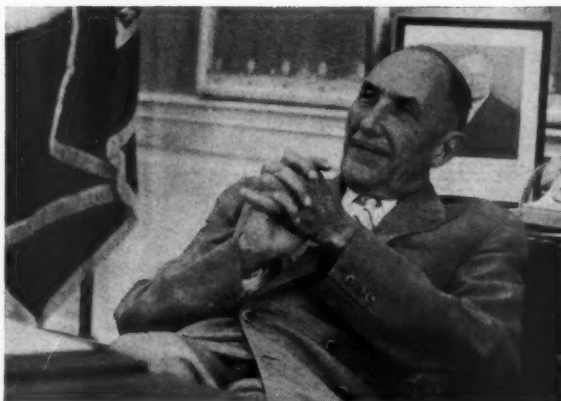
Beyond his accounting experience, Mr. Franke has had a more-than-nodding acquaintance with the machinations of overall management. This experience he gained as Director of the Carolina, Clinchfield and Ohio Railway Co. and as Chairman of the Boards of

General Shale Products Corp. and John Simmons Co., Inc.

But experience does not eliminate the need for hard work. It is again worth quoting the Secretary: "As my golf score shows, I don't have much time for that sort of thing in this job. I play when I can, but it's not very often. I had planned to retire after the report this spring, but when I was asked to take this job, I found myself in the same position as Mr. Gates on his appointment: I didn't particularly want the job, but that was the only reason that I could think of for not taking it. I might add that I intend this to be my swan song with DOD."

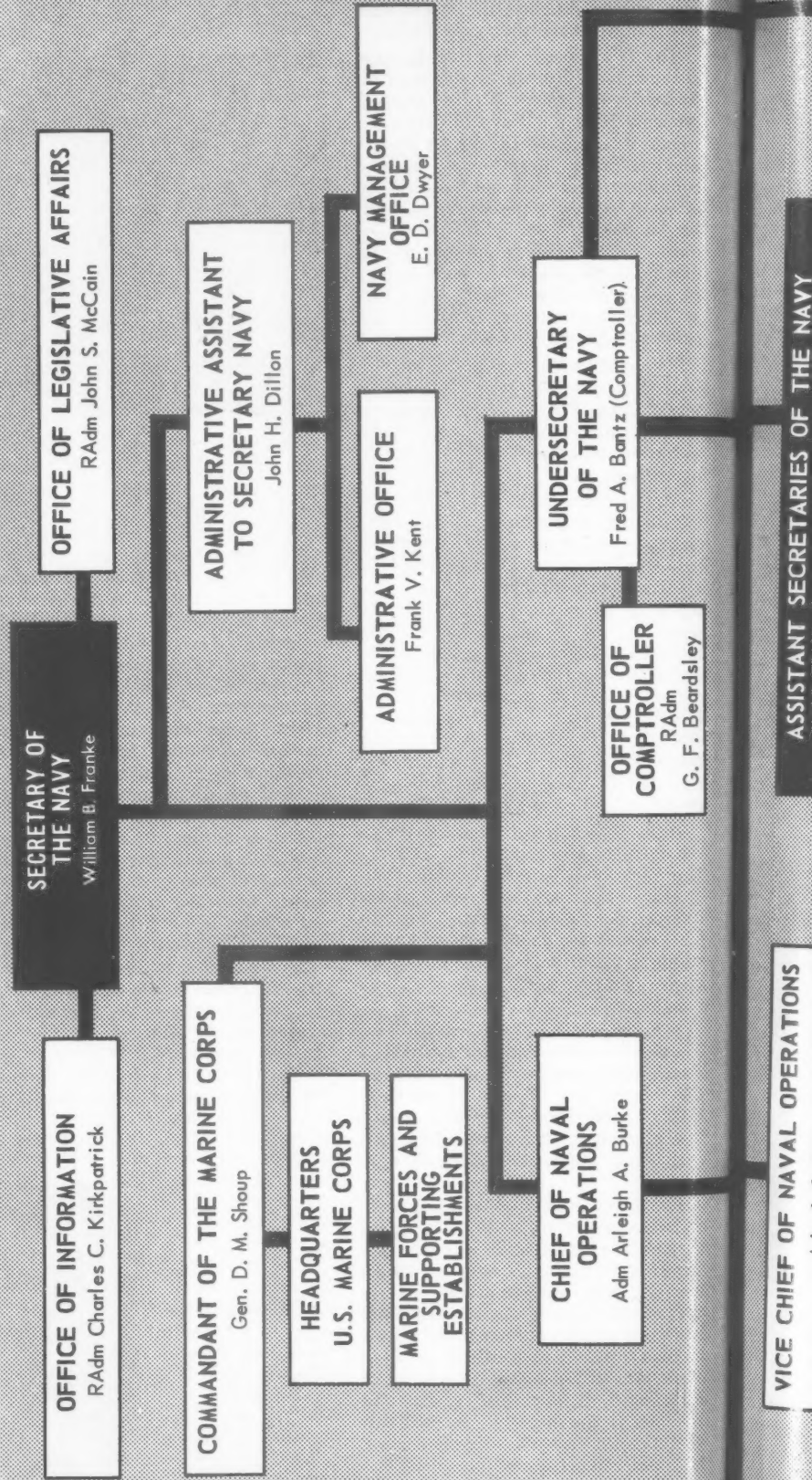
When Mr. Franke leaves DOD, it is certain that he will be able to spend much more of his time with his attractive wife, the former Bertha Reedy, and spend more time visiting his three married daughters, Mrs. Phyllis Fowler, Mrs. Anne Ulinsky and Mrs. Patricia Kouns. And it is equally certain that he will leave behind him an outstanding record of public service and efficient management in the Department of the Navy.

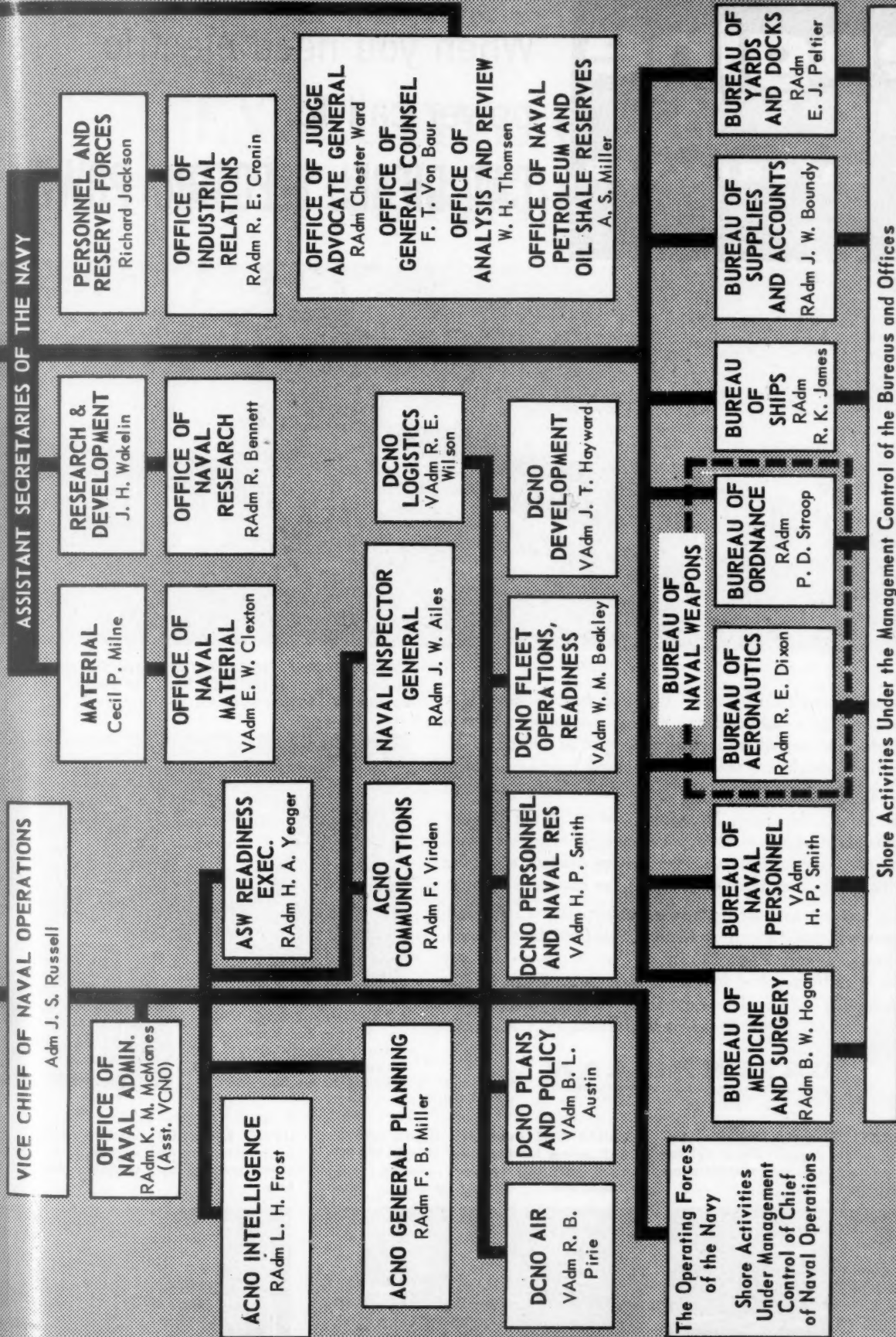
In Franke's job, even relaxation seems to be confined to the long working day.





DEPARTMENT OF THE NAVY





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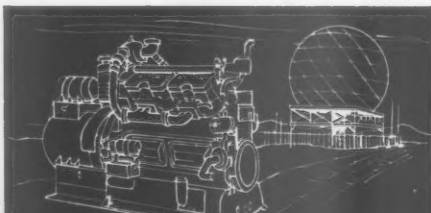
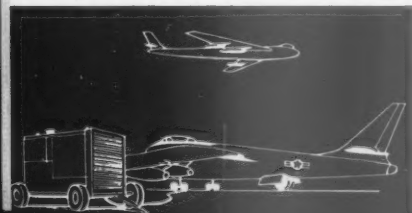
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EXECUTIVE OFFICE OF THE SECRETARY

MOST closely analogous to a Board of Directors, the Assistant Secretaries of the Navy are charged with top level business administration and management of the Navy. The Assistant Secretaries are in a position to cut across all intra-mural disputes in the Navy, while insuring that all of Navy's work is directed to a unified set of goals, offering the most efficient fulfillment of the Navy mission.

In one way, the job handled by the Assistant Secretaries Executive Office of the Secretary of the Navy is comparable with that of the Secretary of Defense. Because Navy maintains two lines of command, there is always the possibility of a dispute between the Bureau side and the operating side, with the Bureaus as the supplier and

the CNO side as the consumer. In such instances it is the job of Secretary of the Navy to step in and make the decision.

This is done, of course, almost as a side-line. Unquestionably the major part of the job handled in these offices deals with the day-to-day guidance of an organization that ranks with the biggest in the world.

UNDERSECRETARY & COMPTROLLER

Under Secretary and Comptroller:

Fred A. Bantz

Assistant Comptroller, Budgets & Reports:

RAdm. Lot Ensey

Assistant Comptroller Accounting & Finance:

N. P. Cassidy

Assistant Comptroller, Audit:

Capt. J. B. Kackley

It is indicative of the importance of the job handled by the Comptroller of the Navy that it has been elevated to the level of the Undersecretary of the Navy, a theoretical half-step above its former position at the Assistant Secretary level.

Although this arrangement is "assumed to be temporary" by Comptroller officials, it is no less a measure

of the importance of the work than Adm. Arleigh Burke's assertion that he spends 50% of his time on money.

Besides the one major change in the Comptroller operation, there have been several less spectacular realignments in the past year or so, all of which aim at more logical and efficient management of Navy money.

Largest of these is the incorporation of an Operations division from Bu-SandA, involving some 4- to 5000 people, mostly from field and clerical offices and Naval Regional Accounting Offices. Navy has also formed a Civilian Manpower Division, to handle allocations in this area. Admits one officer, "it's pretty hard to place something like this anywhere. What we wanted to do was to get the money and billets together. Actually there are only two people in the office."

The former division for Administration in the Comptroller's shop has been consolidated into a larger office directly under the Deputy Comptroller. In another move to consolidation, a Properties and Procedures Branch has been formed under the Director of Accounting. Also in that office, a Data Processing Systems Branch has been set up.

Besides formation of the above listed Assistant Comptroller's offices, there is a new Policy and Planning Council directly under Undersecretary Bantz. As the name would suggest, this is Mr. Bantz's staff group for such matters as recommending the policies that effect either internal or external operations of the office, and coordinating and correlating policy directives and procedural instructions that are set up by the Comptroller.

RESEARCH AND DEVELOPMENT

Assistant Secretary for Research and Development:

Hon. James S. Wakelin

Special Ass't for Military Aviation:

Cdr. R. A. Clark

Special Technical Ass't:

Cdr. O. O. Holmquist

Special Ass't for Research and Development:

James E. Cross

Special Ass't for Civil Aviation:

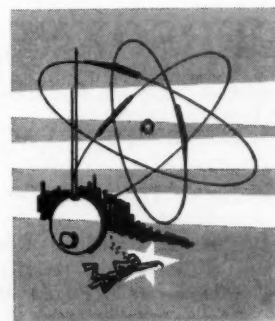
D. S. Williamson

Navy's Assistant Secretary for Research and Development

is the direct and logical outgrowth of the former Assistant Secretary for Air, as a quick glance over the job titles indicates. Comments one aide: "We haven't really changed the job. As much as anything, the change was dictated by Congress' telling us to drop one Assistant Secretary. This seemed to be the easiest way."

The basic job of the office is to advise the Secretary of the Navy on matters pertaining to Research and Development, along with those involving

Naval air. The office also suggests the basic policies under which this part of



the Navy will be run. Typical of the Assistant Secretaries' offices, this one maintains only a small staff—something less than twenty.

Perhaps more important is the office which falls under the Asst Secretary for R&D—Office of Naval Research, headed by RAdm. Rawson Bennett.

This, in a manner of speaking is the operating end of the ASN's office, charged with acting as "scientific staff for SecNav." This office maintains many of its own laboratory facilities besides contracting out most of its own research work—roughly 80%.

ONR includes a Naval Research Advisory Committee, its own Comptroller, a Contract Division, a Civilian Personnel and Services Section, and the corresponding military personnel section.

Under its Assistant Chief for Research, ONR maintains several groups which specialize in the various

branches of science Navy is most interested in. Among these groups: Naval Sciences, Earth Sciences, Biological Sciences, Physical Sciences, Material Sciences, Psychological Sciences and Mathematical Sciences.

In ONR, the problems are summed most pointedly by Adm. Bennett: "What we have to do is to keep both our basic and applied research ahead of current weapon systems. One specific area in which we have to stir up some thinking is Anti-Submarine Warfare. We would like to have some new ideas."

Organizationally, the major change in ONR has been the loss of the Development Coordinator, which was switched to the newly formed DCNO for Development. In some areas of the Navy, this move was questioned on the grounds that it tended to move the function of this office (to coordinate

and keep Navy posted on what its other hand is doing in research and development) away from the technical side of the Navy, and over into operations. Feeling has been that this might tend to divorce the work of the development coordinator from the technical problems which must always be considered.

Another specific area in which Adm. Bennett's office is working is that gaining greater speed, less size and lower weight in Navy weapons and systems. In the case of the latter two, "every time you get a break on size or weight, they come back and bite you. It's the sort of area in which your work is never done."

Working under a theory of central policy and de-centralized operations ONR will form a valuable half of the R&D team which is filled out with the new DCNO for Development.

MATERIAL

Assistant Secretary for Material

Hon. C. P. Milne

Executive Assistant (Procurement)

W. H. Moore

Executive Assistant (Facilities)

John Reed

It is a measure of the competence of this office that there have been practically no changes under the Assistant Secretary of the Navy for Material in the past two years. This has been true in spite of the fact there has been a change in the Assistant Secretary.

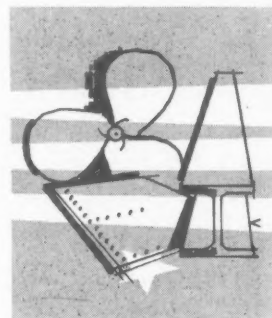
ASN/Material is assigned responsibility for policy, management and control of production, procurement, supply and distribution of material, including general supervision over all of the material functions of the Bureaus. Also, the office is charged with acquisition, construction, management, maintenance, and disposition of real estate and facilities.

Corresponding to ONR in its rela-

tionship to the Assistant Secretary for Material, Office of Naval Material, under VAdm. E. W. Clexton, acts as "executive officer and Chief of Staff" for Milne. In this capacity, Adm. Clexton and his office "take care of all of the nuts and bolts stuff, along with the day-to-day working operations."

What this amounts to is that ONM is charged with planning for and effectuating policies of procurement, contracting and production of material for the entire Navy. Also, ONM determines procurement and production policies and methods to be followed by the Department in meeting Navy's operating requirements, and coordinating and directing work of the Bureaus and various Navy offices in this area.

In this framework, Adm. Clexton's office must work with such matters as "convincing Congress and the people on the outside that we must buy our equipment the way we do," trying to develop the policies which will over-



come the Navy's "hump" problem with World War II ships, and a vast amount of policy-setting as it pertains to Navy's many contractors.

This last item covers Navy's present industrial mobilization policies, and future planning in this area. Also, ONM is in charge of policies pertaining to disposal of surplus Navy property, and in such areas as industrial security, production evaluation plans and inventory, standardization and stock levels and replenishment.

PERSONNEL

Assistant Secretary for Personnel and Reserve Forces

Hon. Richard Jackson

Special Assistants

Naval Personnel: Cdr. R. M. Stuart

Reserve Personnel: Cdr. W. R. Pittman

Manpower: L. Eugene Wolf

Marine Corps Matters: Lt. Col. O. T. Jensen

Legal: Cdr. G. R. S. Scharatt

Civilian Personnel: C. R. Peck

Because of the wide variety of the problems and areas with which the Assistant Navy Secretary for Personnel and Reserve must deal, his office maintains one of the largest in-house staffs of any of the Assistant Secretaries. The job is handling policy, management and control of functions for all active Navy, Marine Corps and Civilian personnel. Besides this, all Reserve forces in the two military categories fall under the aegis of this office.

The Assistant Secretary for Personnel and Reserve Forces draws heavily on

the Bureau of Naval Personnel for the information he needs for decisions in the military areas, in much the same way that Assistant Secretary for Material uses Office of Naval Material.

For matters pertaining to civilian Navy employees, the Office of Industrial Relations is maintained, again corresponding to the ONM/ONR arrangement in the other Assistant Secretaries' offices. The importance of OIR can be measured by the vast number of civilian employees needed to run and maintain Navy's many shipyards,

ARMED FORCES MANAGEMENT

laboratories and testing stations.

OIR also prepares and recommends to the Secretary appropriate policies and procedures governing civilian em-

ployees, interprets these instructions, advises the Secretary on legislation which might effect this area, and works to keep the personnel policies of the

Navy in this area consistent with those of Army and Air Force, through the Assistant Secretary of Defense for Manpower, Personnel and Reserve.

ADMINISTRATIVE ASSISTANT

Administrative Office

Administrative Ass't to Secretary of the Navy: John H. Dillon

Administrative Officer: Frank V. Kent

The job of the Administrative Assistant to the Secretary of the Navy is to keep the Navy running, by acting as Office Manager for Navy in Washington and to work for improved management in this area.

The Administrative office provides the standards and guides needed to keep the Navy's offices running smoothly, directs their implementation, and then inspects to be sure that they are properly followed. Although this office follows a policy of decentralization of authority wherever possible, there are certain areas which naturally

lend themselves to a centralized type of control (such as civilian payrolls). These functions are also handled by the Navy Administrative office. "Before we move into one of these areas, we have to prove we should be there," comments one official.

Admits one top manager in the organization, "we try to stay away from the day-to-day mechanics of administration." On the other hand, taking care of the Navy offices which are spread through 24 buildings in Washington (22 are temporary or leased space arrangements) is no small job. BuShips, for instance, has offices in 6 different locations. Summing it up, one Administrator remarks dryly, "Space we ain't got." Although the new Navy building in Virginia will alleviate this problem, it will be several years before the building is ready.

Management Office

Chief: E. D. Dwyer

Serving as a management consultant to the Navy, the Navy Management Office works towards improving in such areas as Electronic Data Processing, Industrial Methods and Office Methods.

Besides the divisions set up to handle the above three areas, NMO maintains a Management Sciences Staff and an Organization Planning & Review division.

Working either on assignment or on a free-lance basis, NMO, through its field representatives (assigned to each Naval District) is able to offer the Navy across-the-board service, aiming at "more efficient, economical, effective management of manpower, money and materials."

LEGAL OFFICES

Judge Advocate General

Judge Advocate General
RAdm. Chester Ward
Deputy JAG:
Capt. W. C. Mott

"We are the Secretary's and everybody's lawyers in the Navy. Except for contracts, which are covered by the General Counsel, we handle all of the Navy's legal problems." The speaker is Capt. W. C. Mott, Navy's Deputy Judge Advocate General.

In addition to the many day-to-day problems connected with conducting legal operations on the scale necessary for Navy operations, JAG works "a

good bit" on legislative liaison matters.

Handling the JAG duties is a four part organization—with three assistant JAGs and one Assistant for Administration. The Assistant and JAGs cover (1) International and Administrative Law, (2) Personnel, Reserve and Planning, and (3) Military Justice.

General Counsel

General Counsel:
F. Trowbridge vomBaur

Covering the areas of business and commercial law is the office of the General Counsel. Falling in this area

are such matters as acquisition, custody, management or disposal of real and personal property and procurement of services, including such matters as fiscal, budgetary and accounting, and other minor items such as patents, inventions, trademarks.

Operating under the aegis of the Under Secretary of the Navy, the Office of the General Counsel is generally responsible for the non-military law aspects of Navy matters. In this connection, the office of the General Counsel handles—besides its regularly assigned duties—such legal duties as are handed to it by the Secretary of the Navy, the Under Secretary and the Assistant Secretaries.

INFORMATION

Chief: RAdm. C. C. Kirkpatrick

Disseminating information—both internally for the Navy and externally for the public—is the job of the Navy's Chief of Information. The organization

is set up functionally, with three of the five divisions working in specific areas of information and with the other two covering Administrative and Planning.

The three operating divisions are

Public Information, Civil Relations, and Internal Relations. These divisions deal with the press, persons outside of the Navy other than the press, and within the Navy itself.

ANALYSIS AND REVIEW

Director: Wells H. Thomsen

This office advises the Secretary of the Navy on the validity of and the balance between Navy requirements for manpower, material and facilities. It also analyzes, reviews and appraises

the program performance of the Bureaus and offices of the Navy Department, to determine whether or not their performance is meeting approved programs or objectives.

Major divisions within the office

cover Manpower, Material and Facilities. Office of Analysis & Review maintains an Assistant Director for Program Appraisal, covering the various areas of the Navy, and allowing for special projects.

THE NAVY'S BUREAUS

*Called "the backbone of the Navy,"
the Bureaus serve to support the fleet*

BUREAU OF NAVAL WEAPONS

Chief: RAdm. Paul Stroop

Deputy: RAdm. W. A. Schoech

Brand-new and bigger than any of its counterparts, the Bureau of Naval Weapons is the natural outgrowth of Navy's space age commitments. Combining Bureau of Aeronautics and Bureau of Ordnance, BuWeap will offer a single focal point for virtually all of its hardware except ships.

In setting up the new bureau, the watchword has been "Make haste slowly." Prime consideration has been, in a

sense, negative: Navy cannot afford, under any circumstances, to lose momentum on the many weapons systems which will be affected by the bureau merger.

Because of this, BuAer and BuOrd will be operating on a parallel basis for the next several months. Although Congress has approved the merger, and confirmed RAdm. Paul Stroop as the new Bureau's chief, it is going to be quite some time before the bureaus are totally merged—and the last offices

to be effected will be the technical shops in which the most important nuts-and-bolts work is carried out.

Logically, the first offices to be merged will be those which are most similar, such as budgeting, administrative services or technical liaison. But in spite of the unquestioned need for the bureau merger, the size of the operation precludes speedy completion. Because of this, Bureau of Aeronautics and Bureau of Ordnance are being treated separately here.

BUREAU OF AERONAUTICS

Chief: RAdm. Robert E. Dixon

The best measure of the size of the job facing Bureau of Aeronautics is the amount of the \$10-billion Navy budget that it spends each year. Currently, this figure is running between \$3-4 annually—approximately a third of the total Navy appropriation.

Dealing with weapon system problems that are comparable only to those of the Air Force, BuAer must face them with a budget that is only a fraction of the size, and with responsibilities that are nearly as great. From the first days of Naval Aviation, it has been a growing concern, and today it is probably the most important factor in total Navy planning.

The number one problem facing BuAer is money. As inflation creates what amounts to an ever-decreasing budget, the requirements BuAer must meet are continually growing. The

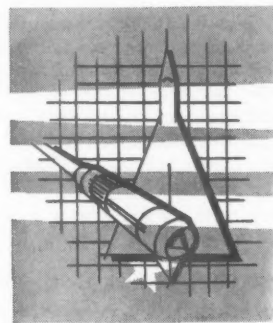
merger of BuAer with BuOrd was only one step of several aimed at cutting operating costs in BuAer. Also, measures such as value analysis (see Oct. AFM) are continually under study or in practice.

From the technical side of the fence, BuAer like most of the Navy, is vitally concerned with a solution to the Anti-Submarine Warfare problem. BuAer has set up its own ASW coordinator, and as a further measure of the efforts involved, a full third of BuAer's Avionics division is currently working full time with the ASW problem.

Almost as important to the Bureau of Aeronautics is the problem of airborne early warning, as it ties in with fleet Air Defense. Summed up briefly, the headache is stated by one officer: "The best device we have to date in this area is still the old Mark I eyeball—with all of its limitations. We

are going to have to come up with something better if we intend to survive."

Finally, BuAer faces the never ending problem of keeping Navy's air power up to date. The difficulty of the job is indicated by the crystal-ball gazing that is needed to do the job right. Points out one officer "Back in 1952, we ran a design competition that finally evolved into the A3D at-



ARMED FORCES MANAGEMENT

tack plane. It's almost frightening in retrospect when you realize that the leading competitor was a turbo-prop plane. Which means we just missed having a turboprop attack plane as the present mainstay of our attack force. This is the kind of decision we have to make just about every day of the week. It's not an easy job."

Tagged "most sensational" by BuAer people is the Eagle/Missileer program, presently in the design competition stage. This program serves to re-em-

phasize the reasoning behind the Bureau merger, while at the same time pointing up a trend in Navy development work. First, the missileer program will marry a relatively low-performance aircraft with a high powered missile. Formerly, these programs would have been conducted by BuAer and BuOrd respectively. By the time competition is decided on the Missileer, Navy will probably be able to monitor it on a single-office basis, through the new Bureau of Weapons.

Secondly, Missileer indicates the first

hardware program to reflect Navy's questioning of the need for higher, faster planes with each new aircraft program. By sacrificing aircraft performance, Navy feels it will be able to spend more on relatively inexpensive missiles which will make up the difference in combat potential.

It is necessarily combat potential that must concern BuAer most, and it is well worth quoting their own job description: "We must put the best possible air weapons in the hands of the fleet."

BUREAU OF ORDNANCE

Chief: RAdm. Paul D. Stroop

On September 1, 1842, Capt. William Montgomery Crane was sworn in as the first Chief of the brand new Bureau of Ordnance. One-hundred and seventeen years later—December 1, 1959—Bureau of Ordnance will lose its name, to become officially the other half of the Bureau of Naval Weapons.

But if BuOrd is losing its name, it more than made up for it with the dowry it brought to the Bureau marriage. A partial list: 1200 contracts on active status with industry; an annual budget in the neighborhood of \$1.25-billion; management and technical control of the 77 field activities making up the Naval Ordnance Shore Establishment; management and technical control of 11 Naval industrial reserve Ordnance plants operated by private contractors; and over 45,000 civilian and military employees.

Perhaps more important from the standpoint of national defense are the specific programs under the control of BuOrd. Number one on the list must necessarily be Polaris, on which BuOrd is working closely with BuShips, through the Special Projects office set up for Polaris.

In the ASW area, BuOrd is mounting two attacks on the problem, in connection with its Subroc program. First, Naval Ordnance Laboratory is working towards a detection device to be used by anti-sub submarines. Next, BuOrd has let a contract to Goodyear Aircraft Corp., for development of the Subroc missile itself. In other areas, BuOrd is working hard to develop better torpedoes and/or mines to be used in the area.

In all of its contract work, BuOrd follows the Navy philosophy that ultimate control of a project must remain with Navy, ruling out weapon system management as practiced by Air Force, with the prime contractor having much

greater control. Working within this framework, BuOrd, like the other Bureaus, has developed several variations on the theme to maintain flexibility, with the best method available for each specific instance.

Typical of this has been BuOrd's management of the Bumblebee family of missiles—the Terrier, Talos and Tartar surface to air weapons. In each case, BuOrd used a slightly different system of managing the program, and the total program's success would seem to be the best possible endorsement of the various ways of doing business.

With each of these, BuOrd worked through Johns Hopkins Applied Physics Laboratories in much the same way that Air Force uses Space Technology Laboratories—with one major exception. Bureau of Ordnance rested technical control with APL, but final program management was retained by BuOrd. In farming out actual hardware development, Navy was able to inject the variety and flexibility that did much to insure smooth completion of all three programs. Major development on Talos was handled by Bendix, under the aegis of BuOrd and APL. Primary hardware work on Terrier was handled by Convair Division of General Dynamics, using Navy-owned industrial facilities at Pomona, California. Finally, most of the work on Tartar was and is being handled by Navy itself, on an in-house basis.

The scorecard on the three missiles is a fair comment on BuOrd's ability to handle complex programs under varying situations. Both Terrier and Talos have already joined the fleet, and Tartar will join in the near future. Terrier, when it became operational in 1955, was the first guided missile in the free world to go to sea. A further measure of the program's success is that Talos may not have fin-

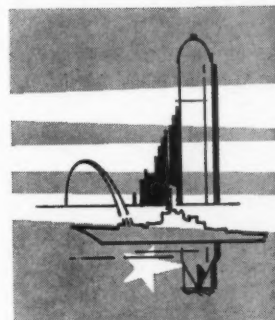
ished growing. Current reports have it that a more powerful missile based on Talos may be developed for use in connection with the nation's anti-missile defense chain.

For combat proof of its development competence, BuOrd can point to the Sidewinder, used so successfully over the Formosan Straits by Chinese Nationalist pilots. Sidewinder is an example of BuOrd work handled on an in-house basis.

For the future, BuOrd will be working on the many jobs it already has, besides whatever is needed to keep the Navy ahead of the times from an Ordnance standpoint.

This work will be done in a growing partnership arrangement with BuAer. At this writing, it appears that the first Navy program to be handled jointly in this way will be the Eagle/Missileer system. There will be none of the arbitrary lead bureau arrangement on this program which in the past had BuOrd working only on solid propelled missiles, while all liquid fuelled missiles were handled by Bureau of Aeronautics.

It appears that under its change in name, Bureau of Ordnance will most certainly continue as a major influence in Navy development and production work, and that the merger of the two bureaus will only serve to re-emphasize the importance of the work that is being carried on by both the former Bureaus.



BUREAU OF MEDICINE & SURGERY

Chief: RAdm. B. W. Hogan

Bureau of Medicine and Surgery is charged with maintaining the health of the Navy. In addition to this, the

Bureau is constantly in search of better ways of doing its job, and in search of the medical measures needed to keep the Navy healthy in an age of atomic

submarines and space travel.

Although it is one of the smaller Bureaus, it is unquestionably one of the most important, and the work

BUREAU OF YARDS & DOCKS

Chief: RAdm. E. J. Peltier

The Bureau of Yards and Docks serves approximately as the Navy's landlord, with primary authority as agent for Navy real estate, and respon-

sibility of designing, planning, developing, procuring, constructing, altering, inspecting and repairing the Navy's Shore Establishment, as regards public works and public utilities.

Besides, Bureau of Yards and Docks is in charge of Navy's Sea-Bees—the well-known Construction Battalions. The Bureau exercises control over rental housing under Navy control, and

BUREAU OF SHIPS

Chief: RAdm. R. K. James

When you think about the Navy, you think about ships. And it is in this connection that Bureau of Ships is one of the most vital single organizations in the entire Navy—without the ships that are built or contracted by BuShips, the Navy would be landlocked.

If this job weren't big enough, it is compounded by the great need for a modern, nuclear/missile age fleet, a fleet which can respond equally well to either general or limited war emergencies, and one which will fit within the tight Navy budget.

Perhaps the three most important programs now being handled by BuShips are (1) conversion to missile armament, (2) development of a nuclear powered force, and (3) speedy completion of the Polaris program, working closely with BuOrd through the Special Projects Office.

In each of these areas, BuShips is making outstanding progress in preparing the fleet for the future. With a growing nuclear-powered submarine force, the recently-launched nuclear cruiser Long Beach, and plans drawn up and awaiting appropriations on a nuclear carrier, this much of BuShips

program is well under way. Equally far along is work to convert present ships to missile carrying configurations. Finally, the first atom-powered Polaris submarines have already been launched, and will join the fleet with their missiles sometime next year.

However, BuShips is currently grappling with a major headache that will become increasingly apparent in the near-future, when the bulk of the fleet, commissioned during World War II, reaches the point of obsolescence. At the present time, the Bureau is groping for answers. Although the ships that are now being outfitted are

BUREAU OF NAVAL PERSONNEL

Chief: VAdm. H. P. Smith

The job of the Bureau of Naval Personnel is to make sure that Navy has all of the most qualified people it needs at the right place at the right time, with right skills to get the job done.

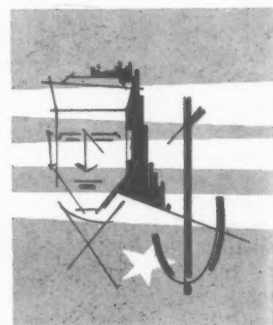
That the Navy's personnel situation is ripe for change is underlined in the heavy emphasis placed on this area in the Franke report on Navy Organization. The major areas of work: officer specialization; possible creation

of a more reasonable officer ratio; increased incentives for qualified personnel; development of an increased Leadership program; and development of the highly-skilled manpower force that will be needed to run a nuclear-age Navy.

These problems must be handled by BuPers in the face of forced cuts in total Naval Personnel—to the tune of 45,000 out of 675,000.

Solving the problems in connection with officer specialization, officer ratios and incentive pay will require legisla-

tive action before they can be made final. The first of these is also waiting



BUREAU OF SUPPLIES & ACCOUNTS

Chief: RAdm. J. W. Boundy

As the name implies, Bureau of Supplies and Accounts is the business bureau of the Navy. Briefly, its job is to be sure that the fleet and shore establishment of the Navy has all of the supplies, repair parts, clothing, food and replacement items that it needs to keep running.

A quick rundown of the managerial and technical responsibilities of BuSandA give a good picture of the

scope of the work: BuSandA has management responsibility for all supply depots, and purchasing offices in the Navy; rides technical herd on all warehousing, issue and shipment of all supplies, runs the supply functions of the Navy Supply system, and handles procurement and disbursement of funds, including the Navy Stock Fund, which covers over half of the 1.2-million items in Navy's inventory.

Heart of the BuSandA system is

formed by Supply Demand Control Points, uniting the efforts of technical, engineering, supply and business personnel in one location for a coordinated operation. These 14 offices determine—for the entire Navy—which items to buy, how much to buy, when to buy, and what sort of distribution will be needed to meet demand.

In addition to fulfilling the basic assigned duties, BuSandA is continually working to bring about greater efficiency in its operations. Areas that are

ARMED FORCES MANAGEMENT

done by its Research and Medical Specialties Section, with that handled by the Aviation Medicine section will mean much in the future of the Navy.

acts as liaison for Navy with private and public interests on such matters as access roads, housing and related facilities and services for the Shore Establishment.

unquestionably more efficient than the ones they replace, there aren't as many, and there is more than a grain of truth in one Bureau officer's comment that "it makes no difference if they are twice as efficient. They can still be in only one place at once."

What is needed is money. This need for funds, coupled with the rising prices of ships and equipment and the constant overhead costs of running a Bureau as large as Bureau of Ships presents a tough problem—and one that will have to be solved in the fairly, near future.

for the recommendations of the Keith Board, a study group under RAdm. R. T. S. Keith studying the Franke recommendations.

Implementation of the announced manpower cuts will fall to BuPers and much activity is already being devoted to improved training of personnel and Leadership programs. In the leadership connection, a special office has been set up, reporting directly to Adm. Smith, working on this program full time, on a world-wide basis.

continually under study include better ways of gleaning the necessary information for making correct supply decisions, increased possibilities for using electronic data processing profitably, and more accurate methods of bringing shipboard supplies into balance and computing and applying readiness and cost factors in calculating stock levels, procurement schedules, distribution of stocks and disposal of surplus supplies.



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Ass't Vice Chief of Naval Operations: RAdm. G. R. Donaho
Ass't Vice Chief of Naval Operations (Gen'l Planning): RAdm. Frank B. Miller

Ass't Chief of Naval Operations (Intelligence): RAdm. L. H. Frost
Ass't Chief of Naval Operations (Communications): RAdm. Frank Virden
Anti-Submarine Warfare Readiness Executive: RAdm. H. A. Yeager
Director, Long Range Objectives Group: RAdm. H. Rivero, Jr.

Chief of Information: RAdm. C. C. Kirkpatrick
Naval Inspector General: RAdm. J. W. Ailes III
Director, Progress Analysis Group: Capt. W. S. Guest
Marine Corps Liaison Officer: Brig. Gen. H. W. Buse

PERSONNEL AND NAVAL RESERVE

Deputy Chief of Naval Operations (Personnel and Naval Reserve): Vice Adm. H. P. Smith

The job in this office is to draw up the Navy's personnel requirements. There is probably no more ticklish area in which a man could work—because the job amounts to keeping all of the people happy all of the time.

Number one on the headache list in this office is trying to cut the Navy from 675,000 to 630,000, while maintaining necessary strength. The answer, of course, will be to de-commission ships and close shore establishments.

But the question is "Which ones do we close?"

Because the Navy's ships are presently running with 83% of their full wartime complement, there are no cuts to be made in this area—without de-commissioning ships. Current efforts are most closely directed to the shore establishment, for this reason.

Another trouble spot is the Navy's officer ratio—the lowest of the services. Explains one Captain, "Air Force has the highest officer ratio, which is understandable, because of their pilots. But we're the lowest, and have our own pilot problems, in addition to our grow-

ing nuclear fleet. With the unified commands asking for equal service representation, this is a tough one." What is needed: legislation.

In the fairly near future, the Naval Air Reserve personnel work will be absorbed in this office. It is now lodged with DCNO (Air).

Major recommendations in the Franke Report concerned the officer specialization system in the Navy. This office is now wrestling with implementation methods and recommendations. A Board headed by RAdm. R. T. S. Keith is scheduled to report shortly after this issue of AFM goes to press.

FLEET OPS. AND READINESS

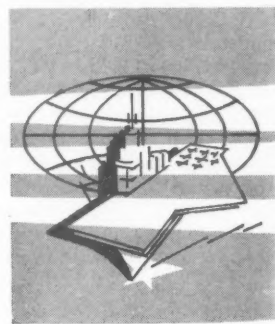
Deputy Chief of Naval Operations (Fleet Operations and Readiness): VAdm. W. M. Beakley

It is said of the officers in this section of CNO that their wives are happy to see them get sea duty—because they are able to spend more time at home. As the name implies, this is the section of CNO that is charged with training, preparing and maintaining the fleet's capability to fulfill its role in war—cold or hot.

Two major changes will effect this division in the near future: (1) the office will take over the Air Readiness responsibility from DCNO (Air); and (2) the approach to problems will be

realigned on a "warfare" basis—planning will be geared to specific problems such as anti-submarine work of air defense rather than general surface warfare, for instance. This will enable Navy to bring unified forces to bear on a given problem. Planes, ships, and submarines, for example, can be brought to bear jointly in anti-submarine warfare.

In another recent change, the former Naval Communications Division has been taken out of DCNO (FO&R) and made into an ACNO's office. The reason for this, in the words of one officer, is "even though the job is the same, there seems to be more and more of it to do every day."



Finally, this office has absorbed Naval Weather Service division from DCNO (Air). Generally, the changes aim to tighten control in the office, and place all work on a more functional basis.

LOGISTICS

Deputy Chief of Naval Operations (Logistics): VAdm. R. E. Wilson

Although there have been several changes in the organization of this office, none of them tamper with the

basic concepts or jobs DCNO/Log must deal with. In the words of one high-ranking officer, "It has simply been a process of falling out and falling in again. We have only tried to

streamline the organization."

Primarily, the changes are as follows: (1) shore establishment responsibility has been broadened considerably, centralizing this function en-

ARMED FORCES MANAGEMENT

tirely in DCNO/Log; (2) the ship Characteristics Board—formerly “buried as a branch in Fleet Development and Maintenance Division”—has been elevated to division status in its own right, will gain prestige and greater meaning; (3) a flag officer in the Supply Corps has been designated as

Director of Material and Budgetary Programs, and as Fiscal Staff Assistant to the DCNO. Goal is centralization of former division functions; finally, (4) a shore facilities planning branch has been established in the Logistics Plans division.

Taken in context, each of the above organizational changes points to a more effective fulfillment of mission—to plan and provide the necessary logistic support of the operating forces of the Navy by implementing the logistic responsibilities of the Chief of Naval Operations.

AIR

Deputy Chief of Naval Operations (Air): VAdm. R. B. Pirie

Recent changes within the DCNO/Air organization may be viewed as falling in three general categories: first, to gear for the future with a new accent on space; secondly, to re-evaluate and generally tighten up operational responsibilities; and thirdly, to transfer certain functions from DCNO/Air to more appropriate divisions within the office of the CNO. Retained under DCNO/Air is cognizance of naval aviation plans, programs, requirements, training and safety.

On the plus side, DCNO/Air has been given full responsibility and authority for Navy's Astronautics Operations Division. Also, the former Shore Establishment branch has been

changed to an Aviation Requirements Branch, handling basically the same job. Finally, the Aviation Safety Division has been elevated to staff stature, and will be called the office of the Coordinator for Air Safety. A new Planning Requirements Branch will handle much of the work formerly assigned to the Air Warfare Division.

Lost to DCNO/Air under the changes are Naval Weather Service, some Research and Development work and much of the Air Warfare Division (some to DCNO/Development, some to Fleet Ops. & Readiness); Guided Missiles (to DCNO/Dev); and reconnaissance and photography work.

In the face of the foregoing, DCNO/Air is still faced with the iron coat of the budget. Present rates of normal attrition are more than can be covered by procurement money in its present

quantity.

Against this, Navy is looking for less functionalization in its design—with the goal of using one aircraft type for several specific missions. Also, says one officer, “We are studying like mad to find areas in which we can save. All of our requirements are being combed for possible overstatement. We can't plan to have more things than we really need. On the other hand, much of our effort is also directed at keeping what we've got in the air.”

In another area, DCNO/Air is working with “simplified sophistication,” aiming at aircraft which could conceivably be slower and lower than the ones they have and are planning, but would be equipped with more advanced weaponry.

PLANS AND POLICY

Deputy Chief of Naval Operations (Plans and Policy): VAdm. R. L. Denison

DCNO/Plans and Policy is charged with “doing all of Navy's work with the Joint Chiefs of Staff, and then turning around and implementing JCS decisions in the Navy.”

Working most closely with DCNO/Fleet Operations and Readiness, this section of the CNO's office is perhaps one of the most important groups of

men in the Navy. If the implications of the name were not enough, the Reorganization Act of 1958 has put them in the position of being the direct contact for Navy with the new and more potent JCS operation.

Areas covered by this office are Military Assistance, Pan American Affairs, Naval Missions and Advisory Groups, Politico-Military Policy, and Strategic Plans. The job is handled by less than 100 officers.

Organizationally, the office has not

changed under the Franke Report, but one effect is being felt by them as a result of the 1958 Defense Reorganization. Before then, most JCS business was done on a committee system. This is no longer true. The result is a heavier load for those concerned, with decision responsibility pushed farther up the chain of command. Although one officer admits “we're using a lot of ad hoc-ers,” the job is still a tough one, and one that shows no sign of becoming easier.

DEVELOPMENT

Deputy Chief of Naval Operations (Development): VAdm. J. T. Hayward

DCNO/Development is the newest—and probably the busiest—of the offices in CNO. Created as a direct result of the Franke Report, Adm. Hayward's shop is already up to its proverbial ears in the development business—in spite of its not yet having a charter.

This much is known: The new organization will serve as a collection point for research and development

functions previously scattered all over the CNO shop, and in other parts of the Navy. In the new set up will be a Guided Missiles Division (From DCNO/Air), an Atomic Energy Division (from DCNO/Fleet Ops and Readiness), the former ACNO office for Research and Development, and the Navy Development Coordinator from Office of Naval Research.

Obviously, the aim is for a unified approach to a continuing and complex problem—that of keeping the Navy ahead in the technological race that is

a major part of today's cold war situation. When Navy's DCNO/Development hits its full stride, it will unquestionably be a heavy contributor in this area.

Besides a Staff Officer for Development Plans, current planning calls for the office to include divisions covering: Plans, Programs and Budget, ASW Weapons Systems, Strike Warfare Weapons Systems, Guided Missiles, Atomic Energy, and Astronautics development and advanced technology.



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THE AIR FORCE

What Air Force Wants: Unity of Control



WHEN the Air Force was set up as a separate service a little over twelve years ago, the principal reason was to achieve unity of air operations. The basic theme, unity of control in air operations, pervades Air Force thinking today, has now been extended into a new philosophical area, unity of control in *military* operations.

Understanding this background provides a good deal of insight into why the Air Force organizes, behaves and debates as it does. Until 1947 air power was divided up to service various geographical areas and military outfits. The significance of the National Security Act that year to the Air Force was that it granted them a great deal of freedom—freedom to design both the type of organization they wanted and determine the way they would carry out their mission. Their organization followed four principles:

Functionality—which meant they organized around mission requirements in both staff and command elements. (There are some exceptions such as the Continental Air Command, divided on a geographical basis, but these are few in number.)

Flexibility—which meant they would change the organization to meet new requirements, new technology, and new systems; eliminate functions which became obsolete.

Decentralization—which meant a continual attempt to decentralize authority and responsibility and consistent with this, decision making at the lowest level having the neces-

sary information. (Air Force is working now to establish several 'centers' which will move some of the purely operating functions away from the Air Staff.)

Simplicity—which meant clear lines of authority, definite assignment of responsibility, and small headquarters. Although their present size might prompt some argument, in relation to the complexities of their problems, Air Force claims their organization is simplified. As one index, they claim, Army has approximately two times their executive strength, Navy almost two and one half.

Put simply, the Air Force mission is to employ air power to support U.S. international interest. Spelled out, this means the Air Force must:

1. Organize, train and equip Air Forces for the conduct of prompt and sustained combat operations in air.
2. Be responsible for strategic air warfare.
3. Organize and equip Air Forces for joint amphibious and airborne operations.
4. Formulate doctrine and procedures and coordination with the other services for defense of the United States against air attack and provide Air Force equipment required.
5. Furnish close combat and logistic air support to the Army to include air-lift support and re-supply of airborne operations, aerial photography, tactical reconnaissance and interdiction of enemy land power and communications.

6. Provide air transport for the Department of Defense.

The Chief of Staff, obviously, is the top military man in the Air Force. He is responsible to the Secretary of the Air Force for the efficiency of the Air Force and its state of preparation in military operations. The Vice Chief operates, essentially, as his alter ego.

The bulk of the staff responsibility of these two men is delegated to the Comptroller of the Air Force and the five Deputy Chiefs of Staff representing six major functional areas—Personnel, Operations, Plans and Programs, Materiel, and Development.

These offices are concerned with all Air Force systems and tasks. They establish policy and procedures, make final decisions, and issue directives on matters clearly falling within the scope of their functional responsibilities. These positions must have a Chief of Staff viewpoint and all of their functional interests must be considered.

Within their offices, the deputies exercise most of their functional responsibility through directors and assistants. This is the organizational level which has the basic responsibility for developing staff solutions. Each director has a specific and clearly defined functional area relating to the provisions of required resources to the various Air Force systems and tasks. Since the planning for and management of the systems is so complex, directors must work closely with each other and sometimes with the deputies other than their immediate supervisor, when problems



Airman of the Future

As Air Force operations cross the edge of space, the entire AF organization must work to keep pace with the increasing demands of its responsibilities.

involve several functional areas. In these cases, one director is designated as the action officer and acts as 'team captain' to secure necessary coordination.

The same philosophy holds true at division and branch level. The man running the show talks with the people they need information from without going through formal channels. The lines of delegation of responsibility on Air Force organization charts do not represent channels of communication or coordination. However, this freedom of communication in developing staff positions does not relieve lower level executives of their responsibility to their bosses for the proper performance of work or keeping the boss informed on important actions.

To assist the Air Staff (with its functional divisions) in the accomplishment of their work steps, the Air Force has revitalized their board and committee structure. Major programming boards are the Air Force Council and the Force Estimates Board, the Weapons Board, the Budget Advisory Board, and the Military Construction Board. These boards are, in essence, advisory, provide a means of bringing together senior officers from each functional area to consider problems and develop recommendations. The boards have no decision powers but they do provide an assemblage of collected judgment and coordination.

Under this headquarters, Air Force is organized into fifteen major commands and two separate operating agencies. The job of all commands are closely related and together they pro-

vide the offensive, defensive, support, training and research elements that make up global air power.

Offensive—the Strategic Air Command, the Tactical Air Command, the Pacific Air Forces and the United States Air Forces in Europe.

Defensive—the Air Defense Command, the Alaskan Air Command, and to a limited degree, the Pacific Air Forces and the U.S. Air Forces, Europe.

Support—Military Air Transport Service, the Air Materiel Command, the Caribbean Air Command, Headquarters Command, the Air Force Accounting and Finance Center and the Air Force Security Service.

Training—the Air Training Command, the Air University, the Air Force Academy, and the Continental Air Command.

Research and Development—only one command, the Air Research and Development Command.

In this complex, far-flung organization of 1.2 million people, the largest single unit is SAC which exists for only one reason—to be capable and ready to attack and destroy any target in the world. The measure of its ability is the foundation of U.S. deterrent strength today. SAC overshadows TAC and the rest of the Air Force because of the nature of the weapon they carry and the fact that to quote one general, "It is our strongest asset in the ultimate idea of winning a war."

Today's aircraft and missile speeds are so great, that, to the Air Force, geography is no longer important. The Air Force view of geography is global

—the target is the determination of what goes where, not the spot from which the weapon is being fired—and, from that, their view of organization is global and decentralized. Thus the Air Force proposal that all strategic systems including Navy's Polaris be organized under one command. The thinking: if the same target is going to be hit by several different elements, they should be under one commander. Where they are fired from is unimportant.

The Air Force goal has been to get global unity into all its commands. Since the mission, not geography, determines the organization, commands should be unified toward meeting that objective. Thus SAC, TAC, ATC and AMC are spread all over the world, are controlled from U.S. headquarters.

Extending this same philosophy, the Air Force has come up with the contention to JCS and the nation that there should be a single service composed of unified commands. Said one top planning general, "To hit the same targets at the same time effectively, we have to have unity."

To many elements of the Air Force, the new Joint Chiefs of Staff organization attempts to set up a wartime operation in peacetime, but so far at least shows not much promise. Among the reasons: no direct operational control; the hardware the unified commands will use is still developed and serviced by separate military branches.

"JCS is just taking the highest bids for jobs down there. The men in JCS are service oriented, don't even have their own reference library, must go back to their separate services for basic information." Added one general, "The budget, which creates all the fuss, is still divided by three separate services without side referees. The services decide which programs will be pushed, which cancelled. This is a service decision, yet in a truly unified command it should be a JCS decision." (One example: "there would be no Project Mercury if the Air Force decided it needed that extra \$125 million for something more important.")

This, they say, is the reason a program is cancelled—the service no longer feels it can fund it. To them, the nation's defense still does not have one group deciding what has to be done, then ordering the services to do it. The services are developing the hardware, with JCS deciding how to handle the end result. Thus, hardware tends to control planning instead of the other way around.

"Furthermore," said a key officer, "the Air Force doesn't have organized minorities (as he says JCS has), writ-

ing position papers either to cut up the parent organization or to protect themselves from being cut up. Where money, promotions, assignments come from is where personal loyalties are. Today's unified commands simply graft together what the services develop when it becomes effective. Only too frequently, pride of authorship or parental adoration, makes the grafting little more than a paper operation."

To the Air Force, war is likely to expand into a space environment within ten to fifteen years. To them, unless the organization is changed to reflect the new mission we are imposing upon ourselves an unnecessary burden.

Says Vice Chief of Staff Curtis E. LeMay, "Aerospace power by its very nature is global. 100% of the earth's surface is covered with air, usable air expanding into space, the natural operating medium or aerospace power. The speed, range, mobility and flexibility of aerospace power, which are constantly being improved by modern technology, allow us to take full advantage of this world-wide medium and expand the scope of Air Force operations to a true global capability. As we move deeper in aerospace, our mobile horizons will become almost unlimited."

For the same global sort of reasons, Air Force places less than no faith in all the conversation about limited and/or brush fire wars—"which we can't support anyway." Said one general officer, "These little limited brush fire pea patches around the world that

occur from time to time we never do anything about anyway. And each time we try, we make more enemies than we protect friends—particularly in Asia. More and more U.S. defense is going to have to originate in the U.S., backed up by Military Assistance Program support overseas.

"Today, a great many of these little countries can't even keep internal order, let alone keep out Russia. On the other hand, it is impossible for us to fight Russia on a conventional basis and always will be. They are already at the spots where we would have to go to fight."

The Air Force agrees that one of our great weaknesses is in limited war areas, but to them the problem is to get in and get out.

Said one operations officer, "They (the communists) have two deterrents to starting any kind of war—a fear that they may push us into using the big weapon, the almost equally critical fear that we may step up our current defense armaments program. If our \$13-billion military budget when Korea broke had remained the same it would have cost us the war. If Russia provokes that same reaction again, they will have lost again—which is the only way they lost in Korea. (Russia's budget has changed very little during all the brush fires starting with Korea.) The Russian quandry—they must keep expanding communism to prove success, but they must cover it up to keep us from getting more dough pumped into our military program."

PLANS AND PROGRAMS:

FROM the standpoint of running the business end of the Air Force operation, the preceding article presents an insight to the type of discussion possible in Plans and Programs, as well as the balance of Air Force top management. However, for the record, here is their major-category job description:

Responsibility for formulating overall Air Force concepts, policies, plans, programs and objectives in support of and during development of national strategy and plans. Translates the assigned roles and missions into Air Force tasks and determines force requirements to support approved national strategy. Supervises political-military, strategic, operational joint and combined war planning activities of the USAF and development of USAF force structures to fulfill the established requirements. Supervises development of long-range guidance for force levels, strategic and operational concepts, programming of major combat types of equipment and R & D activities for a continuing 10-15 year projection, correlating Air Force objectives with advancements with science and technology.

Also supervises the development, preparation and timely publication of major USAF programs and a continuing review and analysis to insure correlation and consistency of all elements thereof. Is USAF Chief of Staff's operations deputy in the former's capacity as a member of the Joint Chiefs of Staff, is responsible for USAF participation in joint and combined policy making and planning activities. Directs and coordinates USAF participation in National Security Council and Operations Coordinating Board Affairs, insures that AF plans, programs and policies are consistent with the policies and decisions of these agencies; monitors the timely development and coordination and expression of major USAF objectives and policies. Supervises and monitors all Air Force matters regarding Latin American affairs.

The People

Deputy Chief of Staff/Plans and Programs

Lt. Gen. J. K. Gerhart

Asst. DCS/P&P: Major General H. C. Donnelly

Executive: Colonel L. R. Moore

Asst., Coordination: Brig. Gen. N. F. Parrish

Asst., National Security Council Affairs:

Colonel J. L. Weber

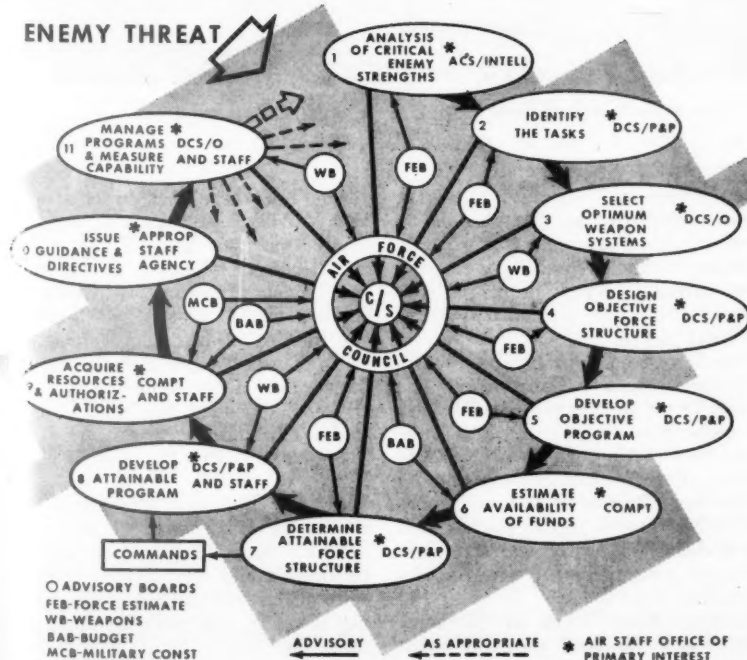
Asst., Western Hemisphere Affairs: Maj.

Gen. T. C. Darcy

Director of Plans: Maj. Gen. H. T. Wheelless

Director of Programs: Maj. Gen. B. J. Webster

How AF meets the threat . . .



Air Force Secretary James H. Douglas

"More Than A Few Diversions"



The many decisions mean more than a full-time job.

FOR half the Air Force's existence of twelve years as a separate service, James Henderson Douglas has been sitting at or near the top of its civilian executive superstructure.

Picked to be Air Force Undersecretary in 1953, he moved up to the top job when the late Donald A. Quarles was appointed Deputy Secretary of Defense in 1957. On a broad policy guidance basis, he has worked all that time on the basic problem of what kind of Air Force the U.S. should have stacked against what kind they are getting.

He has, in essence, been in the midst of the total Air Force effort to maintain a truly ready force today, "Make sure we have a better one tomorrow."

"Of course, there are more than a

few diversions," smiles Douglas, "caused primarily by the changes in programs in an atmosphere of violently changing technology and by the 'sometimes extreme' interest of people concerned with some particular part of the total picture"

The first diversion is handled with a large-sized chunk of hard work. The second Douglas attempts to allay with an explanation, whenever he is able, of the total picture. An example: When the Air Force halted construction on a base near Racine, Wisconsin, Douglas made a special trip to Racine, told the audience of nearly 400 state officials and newspapermen why the decision had been made.

Says Douglas, "When we do things (like closing the base) we really ought

to go out there and explain to the people what looks like a wasted effort really isn't." Evidently Douglas' presentation was effective. Racine raised little ruckus afterwards, instead bought his explanation that "it was solely in the interest of National Defense."

To handle a job like his, Douglas says a man needs three things:

1—A conviction that what he is doing is important.

2—A belief that the work is a challenge.

3—An admiration, and respect for the people with whom he works.

"With those three, anyone who says he doesn't like the work is crazy—in spite of the fact that when you are doing this job, you can't be doing anything else."

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business—Lemay, Douglas,
White, Twining.**



A soft-spoken Chicago attorney and veteran administrator, in and out of government, the 60-year-old Secretary was born in Cedar Rapids, Iowa, he interrupted undergraduate studies at Princeton University in 1918 to enter the Army as a second lieutenant, graduated from Princeton in 1920. After a year of study at Cambridge, England, he returned to the U.S., graduated from Harvard Law School, and began practicing law in Chicago with the firm of Winston, Strawn and Shaw. At about the same time, he was "one of a group who developed the idea that public service was something we ought to do," got his first chance in 1932 when President Herbert Hoover called him into Washington in the depths of the depression to serve as Assistant Secretary of the Treasury.

He stayed on when President Roosevelt came into office but left in 1933, organized a Citizens Committee on Monetary Policy that publicly opposed the Roosevelt financial program.

Back in Chicago, he became active in Republican Party politics, and at the same time resumed the practice of law.

When World War II hit, he went back into the Army Air Corps as a Major, was a Colonel by war's end when he returned to his Chicago law practice and local politics.

From 1946 until Eisenhower called him back into Washington as Air Force Undersecretary, Douglas also managed to acquire an arm-long list of responsible positions outside law and Chicago politics. Among them: Director of the Metropolitan Life Insurance Company, the Chicago Title and Trust Company, American Airlines, and the Chicago Corporation. A member of the Board of Trustees of the University of Chicago, of the Fund for the Advancement of Education and of the Executive Board of the Boy Scouts of America, Douglas has also been president of the Commercial Club of Chicago, President of Chicago's Community Fund, and Council for the United States Golf Association.

His World War II service gave him

what he terms his "first exposure to a very interesting field," the business of flying airplanes—when he served as Chief of Staff of the Air Transport Command and helped organize the "hop" supply operation in Asia. "Surprised by the invitation" to serve as Undersecretary in 1953, Douglas was at first reluctant, later decided to accept. One reason: "Lawyers are relatively more mobile for this sort of thing than people in business."

Only When Needed . . .

A calm, deliberative man, Douglas has been notably adverse to making political hay out of a position which most Washington politicians would consider a godsend. Thus, when his name does crop up in the news columns, it is usually over something important—and more often than not he wins his battle.

Examples:

1—His defense of Military Air Transport Service during Congress' last-session haggling over jet-powered cargo transports;

2—His refusal to let Congressional investigators look at an Air Force Inspector General report on management of the ballistic missile program because "Management has to have control of its information to the point of protecting its sources. They are entitled to advice without everyone participating expecting the advice to be published."

3—His appeal in 1958 for pay legislation to assure a professional military force because of "an urgent need for a system of compensation designed to attract quality and to provide a more realistic level of pay for responsibilities assumed;"

4—His particular interest in the development of a curriculum and establishment of higher standards of teach-

ing and academic work at the Air Force Academy.

(He added later that our "most difficult retention problem today is in Research and Development-type personnel, particularly non-rated officers with highly technical skills.")

Douglas' first hand experience in and out of government as a civilian and military officer has given him a big edge in the Washington arena where the solutions to Air Force problems have required establishing close personal relationships between the military and civilian leaders at the policy making levels of the Defense Department. His adaptability and diversity of interest have been put to their severest tests in his official capacity. It is no coincidence that Douglas monitors the policy of the multi-faceted effort which is one of the leaders in helping to harness U.S. scientific and technical resources to face a new challenge—to achieve a manned space vehicle capability. And its no coincidence either that the Air Force capability, particularly in the human factors sciences field, represents the greatest single source of competence in this speciality in the world today.

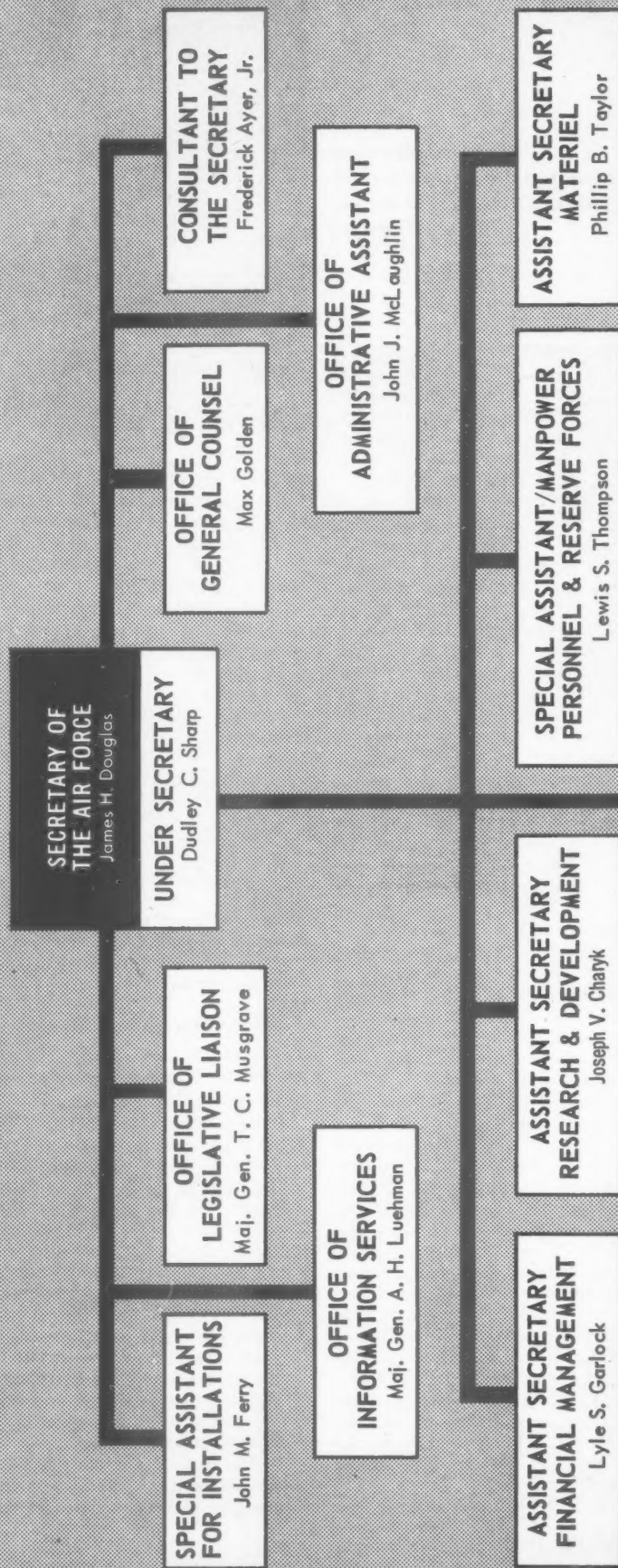
Married twice (his first wife died in 1949), Douglas has four sons, is a member of the Lake Forest, Illinois, First Presbyterian Church.

A member of the Illinois, Chicago, District of Columbia, and American Bar Associations, Douglas is a tough man, too, on the golf course (mid-70's and one-time quarter finalist in the British Amateur Championships).

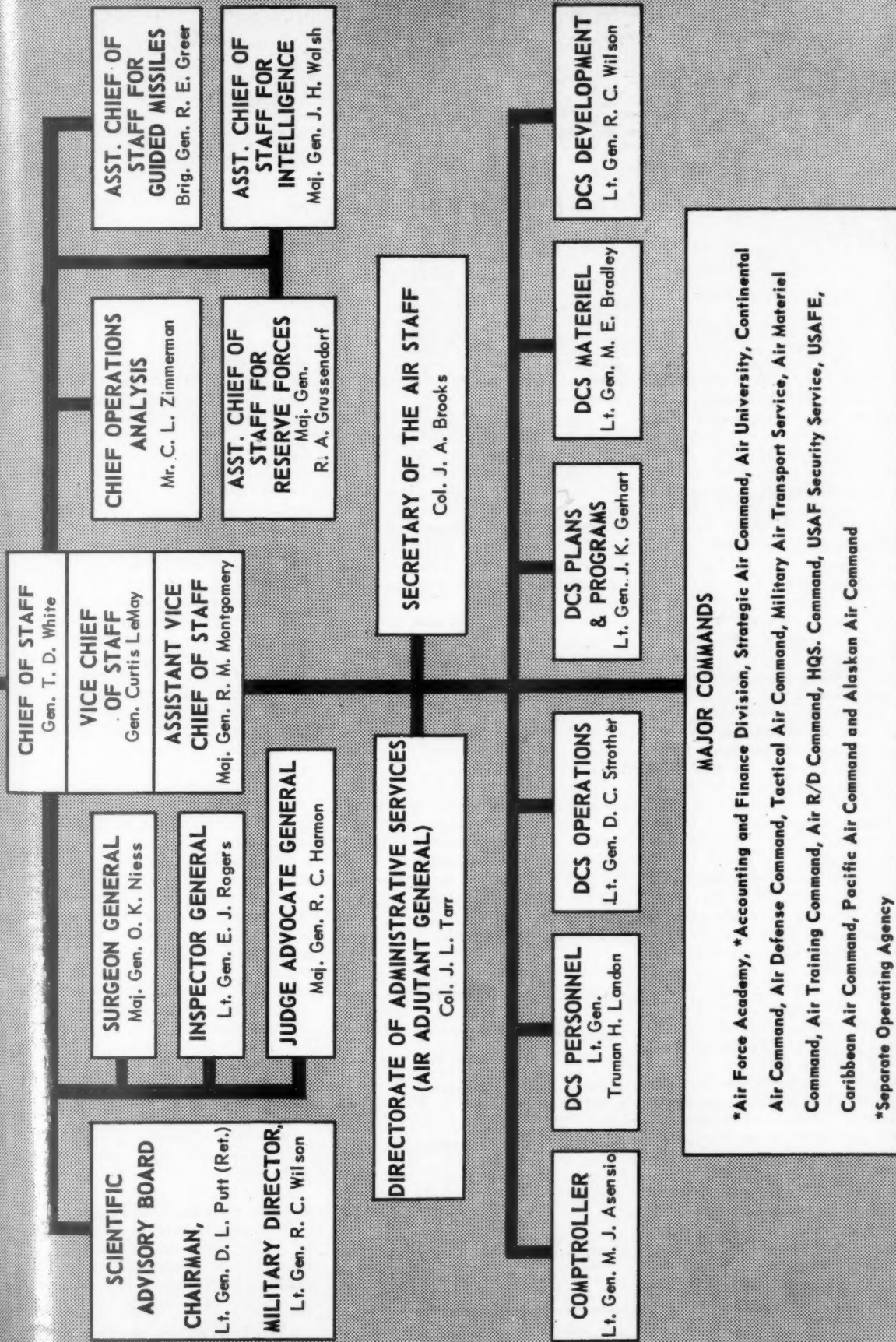
Said one wag in the office: "One reason the tough problems don't seem to upset him too much is probably all that time he spent on the greens analyzing those curling, downhill 4-foot putts."

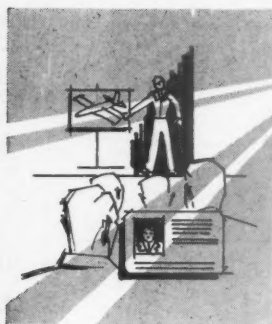


DEPARTMENT OF THE AIR FORCE



CHIEF OF STAFF





PERSONNEL

Dollars, people and ever increasing requirements

WHILE DCS/Operations determines the numerical requirements for personnel, DCS/Personnel is responsible for filling those requirements, and more important is responsible for personnel quality. The Personnel organization has four key directors: Personnel Planning handles basic personnel policy and programming; Directorates of Military Personnel, Personnel Procurement and Training, and Civilian Personnel function in the areas of policy implementation, procedures and operational activities.

In addition, Personnel has some special offices such as the Chief of Chaplains and the WAF Staff Advisor.

As for the Personnel program, to quote one officer:

"As far as our program is concerned, we are dollar or budget oriented. At this level the budget provides much of the guidance as well as the scope of our program. The budget is limited, but, limited or not, we still are obligated to get the most out of what we have. In other words we must emphasize quality.

"Our quality control program is the major guiding principle in Air Force Personnel Planning. The objective is to provide the Air Force with the best possible qualified officers and airmen by systematically acquiring, training, and retaining only the most highly motivated and capable people.

"For the future, continued implementation of the quality control program can be expected to result in: more selective enlistment and re-enlistment; more strict controls on career progression; continued elimination of marginal personnel; some demotions; retraining of airmen into critical fields; and, possibly, selective retirement."

New staff men arriving in the personnel office for work are invariably advised that "there are few, if any, simplified situations which you can expect to encounter." Some examples: Shrinking promotion quotas have placed an ever increasing de-

mand on the officer effectiveness report to become a more discriminating instrument.

There is, too, a certain inherent inflexibility in the military personnel program. For instance, rates of pay and allowances are fixed by public laws and regulatory directives, as are beginning and end strength, grade structures. Officer/airmen ratios are prescribed by higher authority. These factors permit little dollar flexibility and govern a considerable amount of policy.

Said one officer: "Within these and other limitations, we must provide the high quality personnel needed to operate and maintain the complicated weapons and support systems of the Air Force. In so doing we become involved with practically every directorate, division and branch of this Headquarters."

Long before new equipment is ready for use on the ramp, or launch pad, personnel planners work with contractors and development people in ARDC to ensure that Personnel knows the jobs that have to be performed—and the skills and knowledge that they will require.

This data is required to establish

—The People—

Deputy Chief of Staff/Personnel: Lt. Gen. T. H. Landon

Assistant DCS/Personnel: Maj. Gen. R. B. Landry

Executive: Col. C. T. Ireland

Special Assistant: Major A. W. Wilber

Chief, General Officers Branch: Lt. Col. J. H. Watkins

Chief of Air Force Chaplains: Ch. (Maj. Gen.) T. P. Finnegan

Director, Civilian Personnel: J. A. Watts

Director, Military Personnel: Maj. Gen. A. P. Clark

Director, Personnel Planning: Maj. Gen. E. S. Ligon, Jr.

Director, Personnel Procurement and Training: Maj. Gen. L. P. Hopwood

Director, Women in the Air Force: Col. E. J. Riley

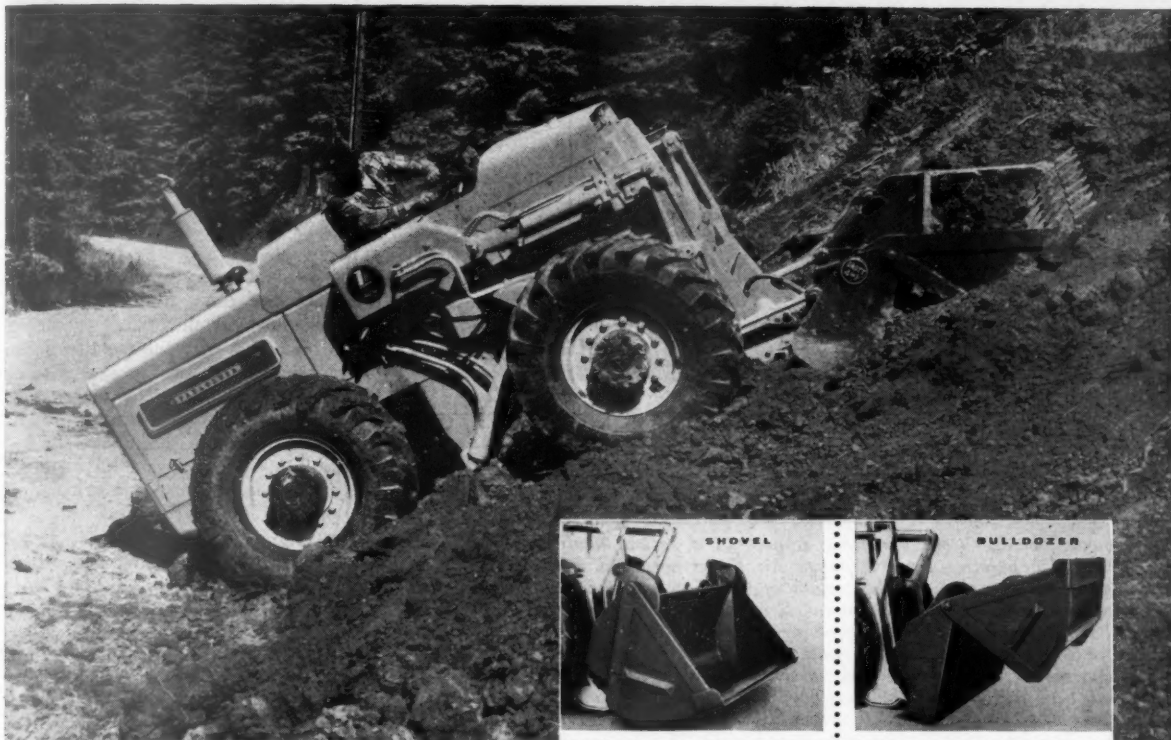
the necessary Air Force career field and skill identifications. (Sometimes completely new career fields, i.e. in the missile business, must be developed.) It also assists in determining the organization tables and many detailed training actions. This is a never ceasing job, integrating various weapon and support system requirements into a world-wide personnel system. It starts with the earliest concept of a weapons system and continues throughout its life of use and modification.

A complicating factor is the rapid program fluctuation which occurs, often through no fault of the Air Force. Personnel requires a certain amount of lead-time for computing personnel requirements, checking the personnel inventory of skills against these needs, projecting gains and losses, determining the training or re-training necessary and then taking necessary assignment actions. This lead-time is sometimes inadequate to do the job smoothly and without hardship to individuals.

The Personnel objectives are: (1) to meet quantitative and qualitative personnel requirements to accomplish the Air Force mission, (2) to maintain an entirely voluntary force of officers and airmen, (3) to increase stability and security for our people, and (4) to increase the stature and prestige of the military services as a career.

The struggle to build a stable professional force, says Personnel, requires continuing effort by every element of the Air Force. While demands for higher and higher skill levels mushroom, opportunities to provide commensurate rewards for the men who "can cut the mustard" grow slimmer and slimmer.

Good example of this talent demand: today's Air Force Supply Officer must have a knowledge of accounting, inventory control and warehousing before he can be considered as fully qualified. He should also possess a knowledge of business law, freight



1

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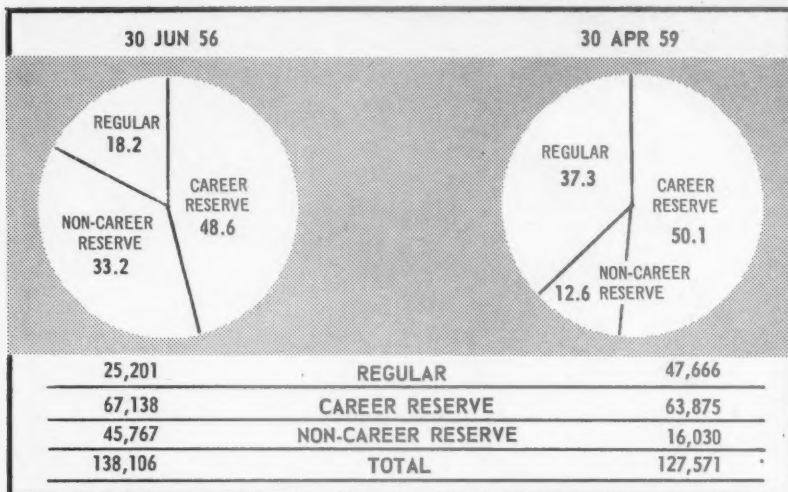
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Although "averages" are somewhat suspect in a several-hundred-thousand-man force, by roughly isolating some segments Air Force personnel comes up with an interesting composite picture on the texture of its officer cadre. For instance, career reserve captains (whether rated or non-rated) are 35 to 36 years of age, 93+-% are married, have two children, have been in service a total of 10.5 years, in grade 5.5, and spent 3.5 years in their previous grade. Over 85% have had some college education. Among majors on the same basis, average age is 39 to 40 years, almost 95% are married, have two to three children. They have spent 16.5 years in the Air Force, have six years in grade and spent 5.5 years in their previous grade. Again, almost 85% have some college education. Among non-career reserve officers, average age is 24, 62% are married, have 1.7 dependents, have seen two years active duty, 91% have college degrees. 12.9% plan to stay in the Air Force, 23.6% are undecided (although most of these will leave), and 63.5 plan to leave. The reasons for staying: they like the retirement benefits and equity. The reason for leaving: "Lack of career opportunities."

transportation, marketing and economics.

On the other hand to quote the Strategic Air Command: "The problem of promotion stagnation is brought clearly into focus when you realize that, except in a rare case, a young officer who enters the Air Force today at age 22 will be 43 years old and still a major—if he is a regular officer—and if he is a reserve officer (and two-thirds of the crew force are reserve officers), he will never be promoted while on active duty above the grade of captain, under the present Officer Grade Limitation Act." They add, "the crew grade structure must be improved to more nearly match the responsibility, the training investment, the dependability and maturity, and the professionalism required."

Housing is another problem. "If we can't house them, we can't keep them—it's as simple as that." To cite SAC again, approximately 80% of its officers and 50% of its airmen are married. Of the some 119,000 officers and NCO's who require housing, only about half can expect to find it on the base. In the Air Force this creates a double headache: for SAC, what happens to reaction time capability when nearly one half the personnel are living in quarters from 30 to 45 minutes away from the base; and, probably much more important from an officer and airmen retention standpoint, how long will a wife and family put up with World War II and/or second-rate housing—particularly when husbands are constantly departing, unannounced for as much as two weeks at a time?

With the cost of developing skilled Air Force personnel constantly rising (AF inventory in training devices alone runs in the neighborhood of \$400,000,000, carries an annual training device budget of about \$100,000,000), selective retention of personnel in the most critical specialties is becoming more and more important—not only because of the boost in personnel quality but also because of economy. Over the horizon the officer promotion problem is expected to ease as the current officer hump from World War II and Korea drops off. But how to hold on to the men until then is a real headache.

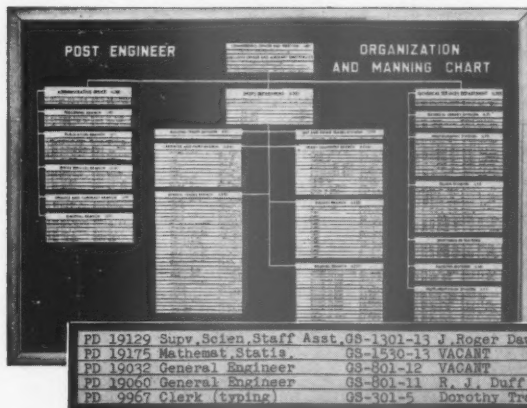
But Personnel cannot afford to relax until "lack of career opportunity" becomes something less than the number one reason men leave the Air Force. To General Landon, the Cordiner Pay Raise Study (most of it) winning Congressional approval and a relaxation in restrictions on some extra service benefits have helped. He says, however, "but we haven't gone as far as we think we should."

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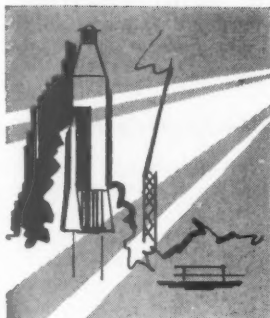
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OPERATIONS

*The ripples that create
the tidal waves—Air Force-wide*

TRANSLATED from the Pentagonese, as outlined in Organization-and-Function Manuals, Directives, and Instructions, the DCS/O job, at top Air Staff level, amounts essentially to making sure that everything being done in the vast Air Force business is really contributing to support of the Air Force operation as it should, is responsive to Air Force aerospace requirements.

Key directorates in the office are operational requirements and operations. Look-alikes on the organization chart, they actually handle two different parts of the same problem. As far as requirements are concerned, OR is qualitative in its analysis, the Ops directorate is quantitative.

In other words, OR looks at an initial requirement pumped in, usually from one of the operating commands, determines basically its technical feasibility, i.e. can it do what's expected, what will it cost, is it the most logical answer?

The Ops directorate takes it from there on, decides how much will be needed when and where. Hottest frying pan in the Ops directorate is usually, for obvious reasons, the Strategic Division. A ripple here sometimes creates tidal waves in other elements for the Air Force and even in industry.

Although the Strategic Air Command is now responsible directly to the Joint Chiefs of Staff, Air Force is still responsible for seeing that it stays strong and healthy, providing the men, money and materiel it says it needs to do its job. The Strategic Division's biggest problem: Insuring that modernization and/or improvement of SAC to enable it to fight better never lags,

justifying and obtaining what SAC needs and what they have to have.

Largest percentage of their time is spent justifying, supporting and defending what the Commander in Chief of SAC says he needs, being sure he gets the wherewithal to do his job.

Said one officer: "We are constantly in the business of justifying at a long list of higher levels the multitude of the support programs SAC needs to keep or improve its capability."

The Training Problem

Nor does their job end there. With the arrival of the missile, the Division has spent countless hours phasing the missile systems in with the manned systems, trying to determine what the proper mix is. In addition they run a daily monitor of the SAC capability, also monitor such things as personnel training (from the finish of basic training on to be sure he, the trainee, is

being molded into a crew which will fit the current Air Force concept of operation).

In addition, when the shopping list of requirements reaches out beyond the limits of the pocketbook, the operations people begin setting requirements—which items in what order are most important. On top of all this, there are the occasional crises. Said one officer, "Between determining requirements and controlling 'flaps,' we have a tough time arranging a coffee break."

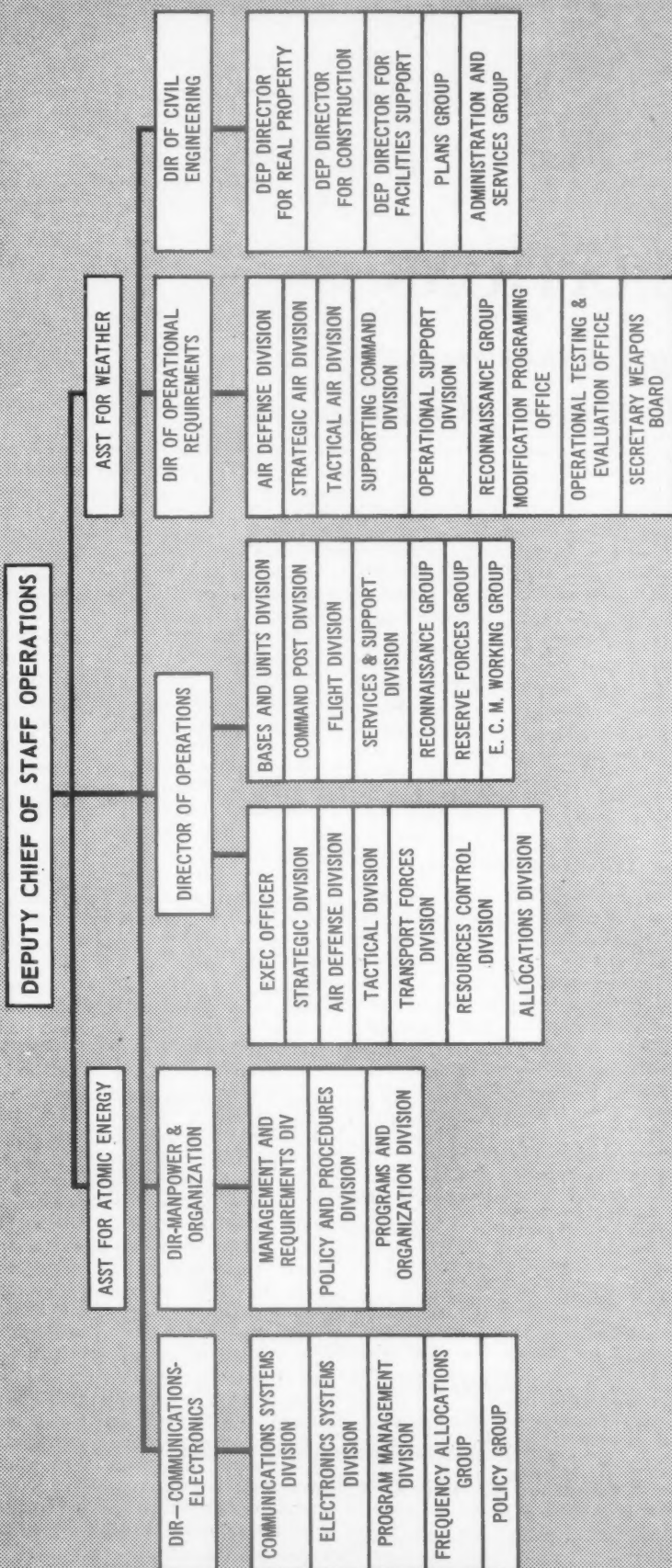
In turning out their most important document, the general operational requirement (a general statement of what is needed to support an operation), Ops divisions and directorates have to be familiar with a great many fields, such as Intelligence information, industry technical developments and a host of other areas.

Said one man in the C-E Directorate: "One of our biggest headaches is staying close to what's going on everywhere else. The business is moving so rapidly, that if we don't stay current, we're dead." In the communications-electronics business particularly, setting requirements, then hunting for spots where they can get the answers, frequently requires long looks into the future, sometimes gets them into the procurement business.

Their responsibility is impressive. The Air Force has estimated that 83% of its communications operations are integral with its capability. Said one officer: "Take away our communications and you take away our control of our weapons systems." With a total investment in communications of over \$1-billion, Air Force has paid particular attention to SAC capability in this

The People

Deputy Chief of Staff/Operations: Lt. Gen. D. C. Strother
Assistant DCS/Operations: Maj. Gen. H. N. Estes, Jr.
Executive: Col. M. E. Childs
Special Assistant: Col. F. J. Pope
Assistant for Atomic Energy: Maj. Gen. C. H. Anderson
Assistant for Weather: Col. R. M. Gill
Director, Civil Engineering: Maj. Gen. A. M. Minton
Director, Communications-Electronics: Maj. Gen. H. W. Grant
Director, Manpower and Organization: Brig. Gen. T. J. Gent, Jr.
Director, Operational Requirements: Maj. Gen. B. K. Holloway
Director, Operations: Maj. Gen. M. A. Preston



area. During the last SAC CPX, in which 165,000 communications transmissions were handled from all over the world, the average time for "normal" transmission of the 9,000 messages sent specifically to SAC headquarters was something like 28 minutes. This did not include alert messages which are handled differently, with procedures that are virtually instantaneous.

Better Communications

Although this is amazing by normal communications standards, Ops is not satisfied, believes it can be improved. At the same time they are cutting the transmission lag, they have set a goal of 99.999% reliability in communications.

One more example of the wide-ranging field covered by Operations: the Civil Engineering Directorate. CE sets standards, designs installations, gives these documents (along with the building money) to Army Engineer Corps or the Navy Bureau of Yards and Docks who act as construction agents. Majority of the actual "brick-laying" is done by civilian firms. (Only exception to this normal routine was the Air Academy which done solely by Air Force CE setup and, in spite of headline blasts to the contrary, has stayed within its budgetary limitations.)

The Day-to-Day Matters

Thus, CE in particular of all the Ops Divisions, works on a-day-to-day matters as much as it does on future programming. Size of the responsibility: in the maintenance and operations alone, they monitor the expenditure of nearly \$1-billion a year. Their two biggest problems: (1) Getting civilian CE's to think in terms of future maintenance in designing and engineering buildings; (2) Their own difficulty in staying ahead of all the changes being made in weapon systems—since at the same time a weapon is being developed, they have to be evolving the installation plans to "bed it down" when it moves into operation. This one crystal ball operation, depending on how well its done, has the biggest single effect in CE on how judiciously they use their money.

In summation, fitted into the basic work steps of the entire Air Staff, the key jobs performed by DCS/O are: (1) To select the optimum weapons systems to handle the tasks which DCS/Plans and Programs has identified as needing to be done to counter-act enemy strength; (2) And to manage total Air Force programs and measure capability to carry them out.

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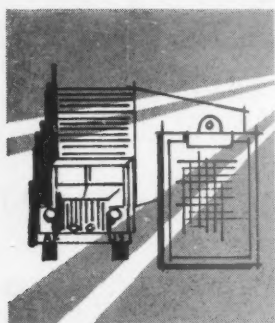
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MATERIEL

Supporting the aircraft and preparing for the missiles

WITHIN the Air Force, the Materiel business has undergone one of the most dynamic evolutions experienced by any organization in the Department of Defense in the last five years.

The Air Materiel Command manages assets valued at more than \$35-billion. The Air Materiel Command's interest in a piece of equipment—whether a screw driver or an ICBM—begins as soon as the need for the item is first determined by the Air Force. This interest ends only after the item is used up, condemned to the junk heap or sold for salvage.

AMC does business every year with some 16,000 prime contractors and/or 143,000 subcontractors; stocks one and one half million items in its supply warehouses, pumps some 35-million items through depot maintenance shops every year.

Responsible for efficient management of over one half the total Air Force budget, AMC must streamline for manned weapon systems, at the same time tailor a new logistics system to meet the requirements of the coming missile force. In other elements of the military establishment, hard emphasis has been placed on "growing up" in running the business side of the operation, but probably in no other service has the emphasis on management mushroomed so rapidly.

The reasons arrived in a rush, giving Air Force barely the time to adjust to its new role as a separate service. Well documented elsewhere, their cumulative effect has been a break away from many of the time-honored methods of developing and producing air weapon systems, resulted too in a primary emphasis on the management end of the business—pulling industry closer to military needs (and separate military offices closer to each other) than they had ever been before in a non-war environment, amounted basically to a controlled attempt to do twice as much in half the time.

In so vast and new an undertaking there were bound to be, and will continue to be, errors in execution. There are still many gray areas, many ties with the "old way of doing business" which have to be reoriented.

But the end result has been as impressively successful as the hardware end results it has produced. Among the examples:

A Hi-Value supply program which has saved nearly \$7-billion in its six years of operation; a pioneering advance in the use of electronic data processing equipment and transceiver networks to fill the supply line; a direct supply system which has saved \$400-million in facilities construction at overseas depots alone in the last few years; a cut in logistics depot personnel requirements of some 62,000 spaces since 1955.

Monitoring this largest segment of the largest business in the world is the responsibility of the Deputy Chief of Staff for Materiel. DCS/Materiel spends most of his time studying hardware programs, trying to live within a skintight budget.

Their biggest headache, says Gen-

—The People—

Deputy Chief of Staff/Materiel

Lt. Gen. Mark E. Bradley, Jr.

Assistant DCS/M: Maj. Gen. W. O. Senter

Executive: Lt. Col. R. Hogg

Special Assistant: Major E. L. Bozeman

Assistant, Production Programming: Maj.

Gen. W. T. Thurman

Assistant, Materiel: J. S. Hoover

Assistant, Security: J. J. Liebling

Small Business Office: J. K. Weddell

Assistant, Mutual Security: Maj. Gen. E.

R. Hutchinson

Director, Logistic Plans: Brig. Gen. L. B.

Kelley

Director, Materiel Programs: Colonel C.

W. Andrews

Director, Maintenance Engineering: Maj.

Gen. T. A. Bennett

Director, Supply and Services: Maj. Gen.

C. J. Bondley

Director, Transportation: Colonel E. C.

Hedlund

Director, Procurement and Production:

Brig. Gen. H. W. Powell

eral Bradley, "Is managing programs. Costs are going up while the budget stays the same. On top of that, while supporting a manned weapon arsenal, we are trying to build a missile capability."

Bradley's office spends a great deal of time preparing and justifying Air Force supply programs to Congress, spends almost as much more keeping track of how well weapons are performing. (One statistic he likes: Less than 2% of AF's B-52s and KC-135s are out of commission for lack of parts to repair them—an indication that "improvement in supply and maintenance has more than overcome increased complexity of these two weapons systems at least.")

In describing the Air Force support problem today, Bradley can draw sharp contrast with the Air Corps supply requirements when he first started flying. One example of these revolutionary changes: "When I first started flying, aircraft electronics amounted to little more than a headset. Today, there are 20,000 pounds of electronic gear in one bomber—a weight factor which is considerably more than my entire aircraft with me in it."

Stage center in the Air Force management revolution has been occupied, particularly in recent months, by a technique of procurement known as weapons systems management. Hashed and re-hashed until conversation threatens to bend it out of shape, weapons systems management is not a rigid set of rules and procedures but rather a management technique (which regardless of title is not unique to the Air Force) that is established to insure that each of the facets of the total problem of developing a weapons system is solved on a timely basis.

It is a rather broad phrase covering the several approaches to implementing the weapons system concept which, to quote Major General Thurman, "is a philosophy of management approach which emphasizes the importance of timely integration of all aspects of a weapons system (or support system),

ARMED FORCES MANAGEMENT

from establishment of the operational requirement through design, development, production, personnel training, operating and logistics support."

He adds, "This procedure of placing greater technical and management responsibility on the contractor for supervision and integration of the complete weapon resulted from an effort to shorten the development-production leadtime; to insure the compatibility of systems and subsystems by developing all elements of the weapon as an integral unit through centralization of control of design in one contractor; and to make use of technical and scientific skills of industry which are in short supply in the Air Force."

From a contracting point of view, this has meant that the Air Force has put the responsibility on the contractor to see that hardware works when it comes off the assembly line, has stopped accepting things with deviations from the standard.

This weapons system concept, and the management techniques which serve it, are practiced throughout the entire Air Force from planning through research and development to operations and supply. They are the Air Force "total package" answer to operating the AF today and building it for the future.

How well the concept is being handled has been the subject of a great deal of Congressional debate, particularly this fall. Says Bradley of the whole idea, "From a supply and procurement point of view, if the concept and the way we handled it are sound, the Capitol Hill people will leave it alone. If not, we will see that it is changed."

Entwined in all the other problems faced by Air Force Materiel has been the sharp change in the procurement situation. Says Bradley, "I don't have to tell you that 1959 has been a rough year for procurement. But 1960 will be even rougher and it is difficult to predict what will happen beyond."

"Technically we seem to have no limits to what we can achieve in our future weapons systems. Two other factors—cost and money—will be the source of most Air Force and industry problems during this period."

A thumbnail sketch of the major offices in DCS/Materiel, the shops which help Bradley do his job, would include:

Mutual Security—is responsible for the Air Force military assistance program, outlines broad programs, policies and requirements, monitors Air Staff actions involving scheduling and delivery of Air Force materiel under the MAP, handles similar monitoring operations in training, requirements, evaluation of program progress.

Logistic Plans—establishes and/or evaluates logistics research objectives, management systems and concepts, broad planning factors utilized in the establishment of logistics requirements; also participates in the development of USAF war plans, exercises broad surveillance over logistical support of operational weapons systems.

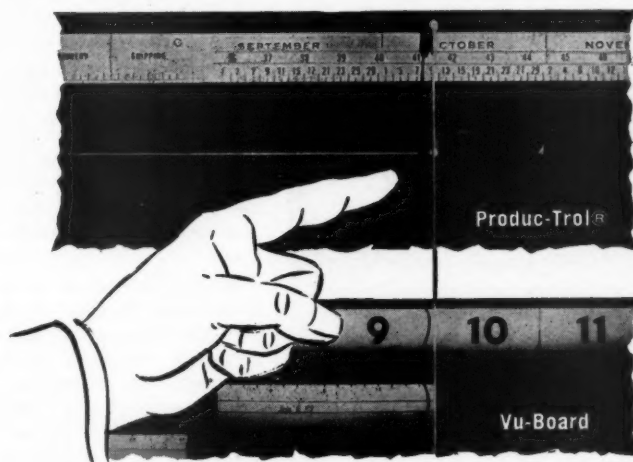
Materiel Programs—develops financial policies and procedures affecting materiel funds, phases interrelated elements of budget/buy programs, develops policies and procedures for determining materiel requirements for procurement programs and budget estimates.

Maintenance Engineering—develops overall maintenance engineering plans and policies to support USAF, Air Reserve and MA Programs, evaluates the effectiveness of maintenance engineering systems related to performance of mission and establishes procedures for improvement; set aircraft, armament and missile maintenance engineering and in-service modification policies, develops maintenance engineering organizational structure and attendant personnel, etc., requirements; handles policy and planning guidance for communications and electronics equipment and systems.

Supply and Services—again at the plans and policy level, handles conservation and redistribution or sale of excess and surplus property programs, develops pre-stocking objectives and programs, also storage; acts as headquarters USAF central office of record for atomic weapons; works out planning guidance and procedures for the receipt, storage, issue and distribution of aircraft, missiles, engine and ground support equipment.

Transportation—monitors transportation aspects of current and projected USAF programs, substantiates funding; develops policies and procedures for efficient and economical worldwide movement of Air Force passengers, personal property, cargo; sets overseas airlift and sea-lift requirements.

Procurement and Production—assists in developing policies and programs for small business; provides staff supervision over Air Force procurement procedures covering such areas as contract financing, pricing, etc.; exercises surveillance over procurement and production matters involving weapons systems; handles the same thing for support systems and furnishes guidance on matters relating to industrial facilities, production equipment, materiel and real property for industrial use.



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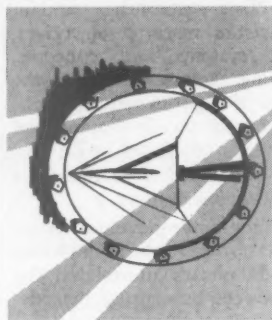
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DEVELOPMENT

Keeping Air Force ahead of the state-of-the-art is the job. This is how it's handled.

RECENT designation of the Air Force as sole supplier of space boosters and heavy hardware within Department of Defense has sharply underlined the heavy responsibility for future planning and research that must be carried by that service.

It is for this reason that Air Research and Development Command has just reorganized to make better use of its in-house facilities, and it is for this reason that the Deputy Chief of the Air Staff for Development is one of the most important organizational entities in the Air Force.

Headed by Lt. Gen. R. C. Wilson, DCS/Development is, in his words, "one of six AF vice-presidents—working with the vice-presidents in charge of finance, personnel, operations, plans and programs, and materiel. Our objective in DCS/D is to maintain USAF technological military superiority. We are responsible to the Chief of Staff for supervision and management, at the Air Staff level, for all research and development within the Air Force."

Actual R&D work in the Air Force is generally handled by Air Research and Development Command, as the operating command under DCS/D. Although this office does not handle actual hardware work, and has one of the smaller DCS staffs in the Air Force (161 military, 112 civilians), it is nonetheless responsible for some \$2-billion a year of the AF budget, and must work years ahead on AF planning.

Organizationally, the office has under Gen. Wilson two Assistant Deputies, one acting as Wilson's "alter ego," the other charged with the highly-publicized AF-Navy-AEC Nuclear Systems program. This program includes not only the Nuclear plane, but also such areas as nuclear ramjets and nuclear auxiliary power for space.

Also in the office are two Assistants to Gen. Wilson, covering Development Programming, and Foreign Developments. The first of these deals

with standardization relating to both foreign nations, and with Army and Navy. The final Assistant serves as a focal point for all Air Force foreign research and development.

Finally, DCS/Development includes three directors—(1) Development Planning, (2) Research and Development, and (3) Development Programming. It is the job of the first of these to look from ten to twenty years ahead, and develop broad-term guidance for future systems. Working closely with the RAND Corp., this office studies future wars, and the kinds of weapon systems that will be needed. The Director of Development Programming says Gen. Wilson, "works with other members of my staff to make all the bits and pieces fit together so that the total research and development program and its major segments are in proper balance and are receiving desired emphasis."

The Director of Research and Development picks up the next step in weapon development, and assumes responsibility when a given system is approved, funded, and ready to go. Maintaining close contact with DCS/Materiel, this office must shepherd the program while it is being built, tested, and made ready for operating units. The office also supervises AF work in

The People

Deputy Chief of Staff, Development
Lt. Gen. R. C. Wilson

Ass't DCS, Development: Maj. Gen. L. I. Davis

Ass't to DCS: Brig. Gen. H. A. Boushey
Ass't DCS Development for Nuclear Systems: Brig. Gen. Irving Branch

Director for Development Programming: Col. J. R. V. Dickson

Ass't for Foreign Developments: Col. W. F. Chapman

Director for Development Planning: Maj. Gen. V. R. Haugen

Director of Research and Development: Maj. Gen. M. C. Demier

ARMED FORCES MANAGEMENT

basic and applied research.

Newest of the offices in DCS/D is the Assistant for space programs, formed just a year ago. Space systems and advanced technology are the two areas in which this office will do its work, getting its space mission assignments from Advanced Research Projects Agency. Falling under the responsibilities of this office are such projects as Midas, Samos and the Dyna-Soar boost-glide program.

At the operating level, within Air Research and Development Command, AF has recently realigned its operations with an eye to more direct response to continental AF requirements, more timely decisions in all areas, reduction of lead-times on weapon development, and better use of the considerable funds it has responsibility for.

Basically a move to de-centralization, the changes in ARDC have set up four divisions in the command: Ballistic Missile Division, at Inglewood, Calif.; Wright Air Development Division at Dayton, O.; a new Research Division, in the Washington area; and a new Command and Control Development Division at Hanscom Field, Mass.

Two of these—Ballistic Missile and Research—are already in operation. BMD has proved its competence over several years, the new Research Division is being built around the former Office of Scientific Research. The Aeronautical Division will begin operations within the next month or so, and the Command and Control Division is still several months from fruition.

Within ARDC headquarters, there will be six divisions under the new setup, aimed at policy decisions rather than detailed program decisions. The Divisions will cover Plans, Research and Engineering, Intelligence, Materiel, Personnel, and Controller. A third phase of the reorganization, to cover ARDC's physical resources, is scheduled for the future.

In describing the reasoning behind the changes, ARDC Commander Lt. Gen. Bernard Schriever said "I can state very simply what our major objective was, and that is to so organize the Command and so establish management procedures which will give us the maximum capability for compressing the time between the initiation of developments to the introduction of new systems into the operational inventory, because, in the final analysis, our main job . . . is to translate technology or state of the art into useful systems for the operational commands."

So it is with this objective that we are establishing our organizational structure and new management procedures. To a very great extent, many of the procedures and philosophies that applied to the ballistic missile pro-

gram on the West Coast in the Ballistic Missile Division we are applying to the overall command structure. And I can very quickly summarize the major points in that; that is, first of all, that we have centralized operating management—that is, there will be four divisions. . . . I will delegate to them the authority of Commander, ARDC, in their areas of responsibility. So they will not only have responsibility; they will have the authority to go with it, and of course, will be provided with the necessary staff, the competent staff, so that they can do the proper management supervision of the major programs that we now have.

"Perhaps from a management procedure standpoint, the one area that I consider to be of great importance in compressing time is what I have called the concept of concurrency. This, in essence, means where we do an integrated planning, programming, and budgeting job. When I say "integrated," I mean we take into account not just development and test, but the production problem, the supply problem, all of the other logistic problems involved, as well as the establishment of whatever operational environment is necessary. This has been the philosophy under which we have carried out our ballistic missile programs, and I think that the performance here in compressing time speaks for itself for this particular approach in compressing time. I feel that it is very important that we apply the same philosophy to all of our major weapon systems. There is a certain amount of calculated risk involved, but I feel strongly that this is necessary in order to buy the several years of getting the latest technology translated into systems for the operational forces."

The problems facing DCS/D are not substantially different from those facing any large organization, although the very size of the operation implies the necessity for getting them solved. Basically, what Air Force would like in this area—as in any other—would be better, more efficient use of manpower, money and facilities. Specifically, DCS/D would like to see something of an increase in the amount of applied research that is being handled in relation to basic research work.

The job is a large one, and one that must have tight priority in the Nation's defense program. With its new organization in ARDC, and the proven success of the setup maintained by Deputy Chief of the Air Staff for Development, AF will unquestionably be in a stronger position for getting its work done.

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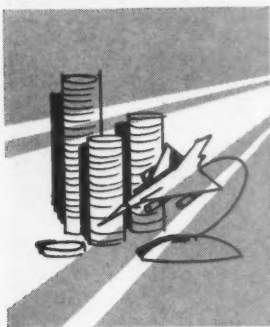
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COMPTROLLER

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"IT IS not feasible to single out any one of our many problems as being the toughest," stated General Asensio in response to a question on what is the toughest current problem facing the Air Force Comptroller. He quickly added that one of the Comptroller's main concerns at present is to insure that financial management systems are as responsive to the dynamic requirements of running the modern-age Air Force as we can make them. This is considered the crux of providing maximum Comptroller support to all the other elements of the Air Force. Rapid strides are being made in the develop-

ment and refinement of systems which will provide better financial management with less resources.

General Asensio observed that the letters "FMS" (financial management system) really should be more appropriately associated with his interpretation of the true concept of the Comptroller function, namely: Financial Service to Management. Gist of his key memorandum to management and the major commands: tell us what you need and we'll try to provide it. Largely because of this attitude, Comptrollers world-wide enjoy an enviable degree of acceptance as responsible

key staff members at all levels of command.

Air Force top management noted early in the game that "there . . . has been a tendency to associate the Comptroller with the term 'control.' This . . . (has) led to the misconception that (he) is trying to control Air Force activities; that he had the authority to bring about executive actions without assuming corresponding responsibility for such actions. Nothing could be further from the actual responsibilities inherent in Comptrollership in the Air Force."

All concerned were pointedly in-

Summary of Actions in the Budget Process (for a Hypothetical FY 60 Budget)

CALENDAR YEAR	CALENDAR MONTHS	MONTHS IN THE PROCESS	ACTION	AGENCY
1957	SEPTEMBER	1	1. PLANNING OUTSIDE OF AIR FORCE	1. NSC, JCS AND OSD
	OCTOBER	2	2. RELEASE OF POLICIES AND ASSUMPTIONS	2. OSD
	NOVEMBER	3	3. DEVELOPMENT MONITORSHIP OF BUDGET PROGRAMMING DOCUMENTS	3. DIRECTOR OF PROGRAMS
	DECEMBER	4	4. DEVELOPMENT OF AF BUDGET POLICIES AND ASSUMPTIONS	4. DIR. OF BUDGET, USAF
1958	JANUARY	5	5. RELEASE OF CALL FOR ESTIMATES INCLUDES BUDGET PROGRAM DOCUMENTS, BUDGET POLICIES AND ASSUMPTIONS AND BOB AND OTHER TECHNICAL INSTRUCTIONS	5. DIR. OF BUDGET, USAF
	FEBRUARY	6	6. PREPARATION OF INSTALLATION ESTIMATES	6. BY RECIPIENTS OF CALL FOR ESTIMATES
	MARCH	7	7. REVIEW OF INSTALLATION ESTIMATES AND SUBMISSION TO HQ, USAF	7. AIR FORCE COMMANDS
	APRIL	8	8. REVIEW OF COMMAND ESTIMATES	8. AIR STAFF
	MAY	9	9. REVIEW OF AIR FORCE ESTIMATE	9. SAB
	JUNE	10	10. FINAL REVIEW AND AIR FORCE APPROVAL OF AIR FORCE ESTIMATE	10. AIR COUNCIL
	JULY	11	11. TRANSFORMATION OF AIR FORCE ESTIMATE TO CONFORM TO OSD AND BOB FORMAT	11. CHIEF OF STAFF, USAF SECRETARY OF AIR FORCE
	AUGUST	12		12. DIR. OF BUDGET, USAF
	SEPTEMBER	13	1. PRESENTATION OF ESTIMATE TO OSD	1. DIR. OF BUDGET, USAF
	OCTOBER	14	2. JUSTIFICATION IN OSD	2. DIR. OF BUDGET, USAF AND AIR STAFF
	NOVEMBER	15	3. ADJUSTMENTS REQUIRED BY OSD	3. DIR. OF BUDGET, USAF
1959	DECEMBER	16	4. PRESENTATION TO BOB	4. OSD
	JANUARY	17	5. BOB HEARINGS	5. OSD, DIR. OF BUDGET, USAF AND AIR STAFF
	FEBRUARY	18	6. PRESENTATION OF GALLEY PROOFS AND EDIFICATION AND FINAL ADJUSTMENT OF AIR FORCE	6. BOB
	MARCH	19	7. CORRECTION OF GALLEY PROOFS AND RETURN THROUGH OSD	7. DIR. OF BUDGET, USAF
	APRIL	20	8. PRINTING OF FEDERAL BUDGET DOCUMENT	8. BOB
	MAY	21	9. PRESENTATION OF DEFENSE BUDGET TO CONGRESS	9. BY THE PRESIDENT
	JUNE	22	10. FURNISHING AF JUSTIFICATION MATERIAL TO THE CONGRESS	10. DIR. OF BUDGET, USAF
	JULY	23	11. HEARINGS IN THE HOUSE OF REPRESENTATIVES	11. OSD AND AIR FORCE
	AUGUST	24	12. HEARINGS IN THE SENATE	12. OSD AND AIR FORCE
	SEPTEMBER	25	13. CONGRESSIONAL APPROVAL	13. THE HOUSE AND SENATE
	OCTOBER	26	14. ENACTMENT OF APPROPRIATIONS	14. BY THE CONGRESS
	NOVEMBER	27	1. ISSUANCE OF CALL FOR FINANCIAL PLAN	1. DIR. OF BUDGET, USAF
	DECEMBER	28	2. DEVELOPMENT AND REVIEW OF INSTALLATION FINANCIAL PLAN AND SUBMISSION TO HQ USAF	2. AF INSTALLATIONS AND AF COMMANDS
1960	JANUARY	29	3. HQ USAF REVIEW AND APPROVAL	3. AIR STAFF, SAB, AIR COUNCIL, CHIEF OF STAFF, AND SEC OF AIR FORCE
	FEBRUARY	30	4. ISSUANCE OF BUDGET AUTHORIZATIONS	4. DIR. OF BUDGET, USAF
	MARCH	31	5. APPORTIONMENT REQUESTS TO BOB	5. DIR. OF BUDGET, USAF
	APRIL	32	6. ADVICES OF ALLOCATIONS	6. DIR. OF BUDGET, USAF
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—The People—

Comptroller of the Air Force:
Lt. Gen. M. J. Asensio

Deputy: William B. Petty

Asst. Compt.: Maj. Gen. A. T. Wilson

Asst. for Systems: C. D. Baldwin

Asst. for Fld & Int'l Relations:
Col. M. A. Libby

Auditor General:
Maj. Gen. W. P. Farnsworth

Dir/Accts and Finance:
Col. W. A. Sundell

Dir/Budget: Maj. Gen. R. J. Friedman

Dir/Statistical Services: Col. M. R. Gray

Dir/Management Analysis:
Col. E. D. Reynolds

formed: "The fact that the Comptroller discovers out-of-line conditions, or has detailed information about a situation, does not represent control. Control is exercised by taking action and action can only be taken by an official who is assigned responsibility and authority for the operation."

Although a Comptroller is basically a staff officer on the Commander's planning and policy-making staff at each echelon throughout the Air Force, in carrying out his job, i.e., budgeting, accounting and finance, statistical services, management analysis, and auditing, he is of course not excused from

exercising managerial judgment in rendering these services for the command and staff.

Through the operation of these essential services to command, the Comptroller is enabled to derive and thus provide an objective, across-the-board look at the entire operation which is so necessary for maximum command effectiveness. Other valuable contributions which the Comptroller makes toward efficient operation of the command derive from the active role he plays in programming, planning and participating in policy-making. Since, in the final analysis, it is always the program that governs, General Asensio pointed out that the Comptroller's ability to convert programs to dollars and show the financial impact of decisions on other programs is foremost among the many services he renders to management in these days of limited budgets and rigid expenditure controls.

At Headquarters USAF-level, to assist him in discharging his responsibilities as Comptroller of the Air Force, General Asensio has a Deputy Comptroller (civilian), an Assistant Comptroller (military), two Special Assistants, four Directorates and an Auditor General. Briefly, the Comptroller's shop functions as follows:

Directorate of Accounting and Finance—is responsible for the establishment of policies, systems, and procedures governing financial accounting, reporting, and disbursing for all activities of the Air Force. This is the youngest directorate which was recently created by a merger of the functions of accounting and finance. This action was taken because it placed accounting, disbursing, and financial reporting in the same area without duplication of records and accounts files, and efforts. Further, the complete integration of all accounting and disbursing functions into a single element permits direct correlation of these activities and thereby should facilitate more effective compliance with existing laws and regulations.

Auditor General—provides Air Force management, at all levels, with an independent, and constructive evaluation of the effectiveness and efficiency with which business management responsibilities are being carried out. The auditing techniques and procedures employed by the Auditor General are patterned after and are consistent with those generally employed by leading firms of Certified Public Accountants as well as by the Comptroller General. The basic difference is that it is basic to the Auditor General's function to detect incipient errors so that correction may be effected to preclude their occurrence.

Directorate of Budget—as a key

The Air Force Budget

New Obligation Authority—
FY 1960

(Thousands of Dollars)

FY 1960 Appns.

Military Personnel

Military Personnel, AF	3,912,000
Reserve Personnel	54,000
National Guard Personnel	48,000

Operation & Maintenance

Operation & Maintenance, AF	4,195,006
O&M, Air National Guard	169,000
Prep. S/S of Mil. Property
Misc. Expired Accounts, AF

Procurement

Aircraft Procurement	4,284,600
Missile Procurement	2,540,550
Other Procurement	1,109,650
Acft, Msls & Rel. Proc.
Proc. O/T Acft & Msls.

Res. Develop. Test & Eval.

1,159,900

Military Construction

Mil. Constr., AF	776,833
Mil. Constr., AF Res.	4,000
Mil. Constr., ANG	16,440

Total	18,269,979
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member of the Comptroller team, has the functional responsibilities in the area primarily dealing with obtaining the authority to expend government funds (appropriation laws) and the administration of this authority in order to provide the financial resources necessary for the performance of the Air Force mission. Contrary to popular belief, this organization does not prepare and present the budget, but instead organizes its presentation and monitors its presentation so that those who bear responsibility for programs continue their detailed support and justification.

Directorate of Management Analysis—provides management data and over-all analyses for top management and commanders of the Air Force.

Directorate of Statistical Services—establishes policies and procedures for timely collection and transmission of statistical data concerning all Air Force functional areas.

Because tying all this together is a little too much for one individual, General Asensio has two offices to provide his own internal control. The Assistant for Systems outlines the development of systems and assures that all projects progress on the same priority and on an integrated basis. Although it is rarely noted, Comptroller systems are frequently just as dynamic as other Air Force programs and projects. Further, they must be devised with emphasis on simplicity and absolute necessity therefore lest the charge be made that undue concentration is being accorded financial management systems to the detriment of over-all management of the Air Force.

The Assistant for International Relations maintains continuous liaison with all field activities: monitors necessary actions in regard to international security affairs and programs and develops plans and policies in coordination with the DCS/Personnel for the training and career development of Comptroller civilian and military personnel.

In all this bustle of activity the greatest notice is accorded the functions of the Directorate of Budget, primarily because of public interest in the financial requirements of the United

States Government as a whole and specifically those of the Department of Defense. No method has yet been devised to assure the acceptance of a long-term program for the military and thus to avoid the disruptive effect of sudden changes. Toward the goal of minimizing disruption effort is being made to shorten the time cycle of program preparation and related budget development through the use of automatic data processing equipment. Considerable progress has been made—enough to indicate great promise—but major changes will become apparent only after automatic applications have become much more developed and more generally understood. It is evident to all, however, that the technological progress that characterizes the advances in weaponry extend as well into the relatively unseen activities of the Comptroller.

Dates to Circle

November 9-13

American Chemical Society (Rubber Div.) Convention—Washington, D.C.

November 9-15

National Electric Mfg. Association Convention—Atlantic City, N.J.

November 11-14

Society of Naval Architects & Marine Engineers Convention—New York, N.Y.

November 16-20

American Rocket Society Convention—Washington, D.C.

November 17-20

Aviation Trades Association Convention—New Orleans, La.

November 29-December 4

American Society of Mechanical Engineers Convention—Atlantic City, N.J.

November 30-December 2

Army Commanders' Conference—Washington, D.C.

November 30-December 2

Information Officers Conference—Washington, D.C.

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